

THE SCHOOL JOURNAL.

"Education is the one living fountain which must water every part of the social garden."—D. W. EVERETT.

(NEW YORK.)

"Man cannot propose a higher object for his study than Education and all that pertains to Education."—PLATO.

VOLUME XIII., NUMBER 40.
Whole Number 513.

NEW YORK, NOVEMBER 5 1881.

\$2.00 a year.
SINGLE COPIES 7 CENTS.

INDISPENSABLE to the PRIMARY TEACHER.

"FIRST TEACHING."

For Kindergarten and Primary Teachers.

MONTHLY; 16 PAGES. . . . \$1.00 A YEAR.

The first number of a monthly paper entitled "FIRST TEACHING," designed to give instruction in right methods of teaching young children, was issued last month. The main feature of the new journal will be to report the exact methods employed by the best teachers. Theoretical "papers" written on the education of the child are felt by most teachers to be impracticable, although some of them possess acknowledged beauty. "FIRST TEACHING" is a right hand of help to the primary teacher. The publishers will be aided by every lady possessing skill and experience as a teacher—one who has been carefully trained in normal methods. The following subjects will be discussed.

The Kindergarten.

Methods of Teaching Reading, Writing,

Spelling, Composition, Geography,

The Arrangement of the School-Room, Etc., Etc.

History, Music, Etc., Etc.

The Management of Children.

Occupation for Young Children.

This paper is the same size as the SCHOLAR'S COMPANION, and neatly printed on good paper. A large number of subscriptions have already been received, more than justifying our expectation that it would be a success from the start. Subscribers to the INSTITUTE will get in that paper most of the material in "FIRST TEACHING."

AGENTS WANTED

every city in the United States to visit the Primary Schools to receive subscriptions for the INSTITUTE and FIRST TEACHING, to whom liberal terms will be given. Send for sample copy and terms to

E. L. KELLOGG & CO., Educational Publishers 21 Park Place, New York.

Appletons' Elementary Reading Charts.

FORTY-SIX NUMBERS. PREPARED BY REBECCA D. RICKOFF.

Every Chart in the series has in view a definite object, which is thoroughly and systematically developed.

Every step in advance is in a logical order of progression and development.

The beautiful and significant illustrations are especially noticeable and attractive feature of the Charts.

Pictures, objects, and things employed, rather than abstract rules and naked type.

They follow the natural method of teaching, appealing to those faculties of the child that are most easily awakened, and inciting correct mental processes at the outset.

They are arranged to be suspended when in use, from the back of a common chair, thus securing at all times a good position for convenient and advantageous display before classes.

Send for price-list and fuller particulars.

APPLETON & CO., Publishers: New York. Boston. Chicago.

THE PRINCE OF SONG.

Collection of Sacred and Secular Music for Elementary and Advanced

Singing Classes, Choirs, Institutes and Conventions.

By C. C. CHASE and C. C. WILLIAMS.

The PRINCE OF SONG contains the results of the best experiences of these two most successful teachers and conductors, and is just what might be expected from real live, progressive, wide-awake men.

In presenting this work to the musical public, we have we can heartily recommend it as fully meeting the requirements of a book of this scope and design, and that its practical use will demonstrate that it is so.

THE PRINCE OF SONG.

75 cents each, by mail, \$7.50 per dozen by Express.

JOHN CHURCH & CO.,

5 Union Square, New York.

The Latest and Best.

LIPPINCOTT'S

POPULAR SERIES OF READERS.

By MARCUS WILSON.

The New Series of Readers embraces a First, Second, Third, Fourth and Fifth Reader, together with a supplementary volume designed both as a

READER AND SPEAKER.

All Properly and Handsomely Illustrated The Series of Five Readers are now Ready.

Liberal Rates for Examination and Introduction.

Address.

J. B. LIPPINCOTT & CO.,

PUBLISHERS: 715 & 717 Market St., Philadelphia.

ANALYSIS AND PARSING.

Inexperienced teachers and others who wish to acquire a clear and concise method of analysis and parsing, can find a competent instructor by addressing—Care of E. L. Kellogg & Co., 21 Park.

GRAMMAR.

72 A WEEK. \$12 a day at home easily made. Costly

Outfit free. Address TRUX & Co., Augusta, Me.

THE NORWAY MUSICAL ALBUM.

By FORESTIER and ANDERSON.

A collection of weird, strange, and yet strangely captivating Songs and Melodies from the land of Old Norway; just the music that inspired his imagination. Norse and English words. A musical novelty that will delight lovers of what is wild, rich and romantic in legend and song. Price \$2.50.

GARFIELD'S FUNERAL MARCH. Fine portrait. 40 cts.

ROBERT FRANZ' ALBUM OF SONG.

Old and new. Approved by the master himself. A book in which every note is a gem. German and English words. A hundred exquisite songs. \$2. bds.; \$1.50 cto.

HERALD OF PRAISE. or choirs and conventions. \$1.

THE IDEAL. (75 cts.) By L. O. EMERSON. School book of the distinguished author. Admirable collection of interesting, wide-awake, effective music, combined in a practical and thorough course. Ideal success in an ideal singing class will result from using the book.

SONG BELLS. For common schools. Emerson. 50 cts.

Oliver Ditson & Co., Boston.

C. H. DITSON & CO., 843 Broadway, New York

PENMANSHIP, DRAWING, BOOKKEEPING.

Publications by H. W. Ellsworth, 21 Park Pl., N.Y.

1. Reversible Writing Books, Large, per doz. (6) \$1.20

2. Reversible Writing Books, Small, " (10) .84

3. Reversible Drawing Books, " (5) 1.80

4. Manual of Essential Penmanship. . . . 1.00

5. "Pen-that-is-a-Pen." No. 1, Fine; No. 2, Elastic; No. 3, Ladies'. 14 gross.25

6. Bookkeeping and Business Manual. . . . 1.35

7. Steps of Bookkeeping (Short Course).60

8. Bookkeeping Chart, \$100; Blanks, 75 cts.

Send for full list and Introduction Offer.

A. S. CLARK,

145 Nassau St., or 87 Park Row, N. Y. City

SECOND-HAND SCHOOL BOOKS!

Bought, Sold, and Exchanged.

BACK NUMBERS OF MAGAZINES AND REVIEWS.

CATALOGUES UPON APPLICATION.

Standard Works of Permanent Value.

Ster's Words of the Lord Jesus. 3 vol. \$12.00

Fairburn's Typology of Scripture. 2 vols. 5.00

Knapp's Christian Theology. 8 vo.3.00

1000 Mistakes Corrected. 12 mo.1.00

N. TIBBALS & SONS,

Publishers, Booksellers and Stationers,

By mail. 37 Park Row, N. Y. City.

ESTERBROOK'S STEEL PENS



Leading Numbers: 14, 048, 130, 333, 161.

For Sale by all Stationers.

THE ESTERBROOK STEEL PEN CO.,

Works, Camden, N. J. 26 John St., New York.

THE Complete Life of JAMES A. GARFIELD.

700 Pages. Able Authors. Fine Illustrations. New, Authentic, Complete. His early life, rise into prominence as a Soldier and Legislator; election to the Presidency; the formation of his Cabinet; the contest in Congress; the Assassination Attack; the Surgical Treatment, Removal to Long Branch; his death and burial. Will sell now in every Family. AGENTS WANTED Everywhere. For full Particulars address immediately.

J. C. McGRUDY & Co., Philadelphia, Pa.

SPENCERIAN STEEL PENS.

In 20 Numbers, of superior English make, suited to every style of writing. A sample of each, for trial, by mail, on receipt of 25 cts. Ask your Stationer for the Spencerian Pens.
IVISON, BLAKEMAN, TAYLOR & CO., New York.

SEASONABLE INFORMATION.

We have heretofore taken occasion to call the attention of our readers to the merits of MADAME PORTER'S COUGH BALSAM, and do so again, believing it to be what its proprietors claim for it. It is a remedy which has been long known, and is very generally and extensively used, particularly in New York and the New England States where it is kept on hand as a household remedy, and where its virtues are highly and justly prized. It is peculiarly adapted to children, being very palatable and free from nauseous taste, and therefore readily taken by them. It is at the same time one of the most efficacious remedies in use. It has maintained its high standard of excellence for over forty years, despite the many remedies which in the meantime have been extensively advertised in the public prints. It is not claimed for it that it is a cure for Consumption, although even in the worst cases of that disease we hear that it affords relief, when relief is all that can be expected.—*Christian Advocate.*

"WHAT would you do if you were me and I were you?" tenderly inquired a young swell of his lady friend, as he escorted her home from church.—"Well," said she, "if I were you I would throw away that vile cigarette, cut up my cane for firewood, wear my watch-chain underneath my coat and stay at home nights, and pray for brains."

GOLD AND SILVER.—No one owns as much gold as a ton, or of silver. A ton of gold is worth \$602,875; of silver, \$2,000. No man could seize on a cubic foot of gold and carry it off, for it will be 1,200 lbs.; it is worth a good deal of money—\$300,000. A cubic foot of silver weighs 800 lbs. and is worth about \$40,000. If all the gold in the world was made into a solid mass, it is estimated it would make a cube thirty feet on a side and be worth \$9,500,000,000.

JOHN MCGINNESS says: Dr. Benson, I will pray for you as long as I live, because you took pity on me when I was sick and in the hospital, and sent me two boxes of your Celery and Chamomile Pills, and they cured me of Sciatica, Neuralgia and Nervous weakness.

A SCHOOL-TEACHER asked: "What bird is large enough to carry off a man?" Nobody knew; but one little girl suggested "a lark." And then she explained: "Mamma said papa wouldn't be home until Monday, because he had gone off on a lark."

ROSY CHEEKS
Young ladies want, and all want healthy looks as well as feelings. Now how to get and keep well is the problem to be solved; to all we say, look at the testimonials in the advertisement of the Blanchard Blood and Nerve Food—the best Physicians, Ministers, Lawyers, and hosts of others have testified to its merits. If you don't believe it, send for circulars, or what is better, try the Food for yourself.



NEURALGIA.

Nervous Irritability, Sciatica and all painful Nervous Diseases.—A treatise by a well known physician, a specialist on these subjects, concludes as follows: "Neuralgia is one of the most painful of diseases, and is attended with more or less nervous irritation. Sciatica is also a form of neuralgia, and all painful nervous diseases come under that name. Neuralgia means nerve ache, and therefore you can suffer with neuralgia in any part of the body, as the nerves are supplied to every part."

I have for many years closely studied the cause of neuralgia, and the nature of the nervous system, with the many diseases that it is subject to, and have found by actual experience that the true and primary cause of neuralgia is poverty of the nervous fluid—it becomes impoverished and poor, and in some cases starved, not because the patient does not eat, but because what is eaten is not appropriated to the nervous system; there are many causes for this, but Dr. C. W. Benson's Celery and Chamomile Pills have in my hands proved a perfect remedy for this condition and these remedies.

Sold by all druggists. Price, 50 cents a box. Depot, 106 North Eutaw St., Baltimore, Md. By mail, two boxes for \$1. or six boxes for \$1.50, to any address.

DR. C. W. BENSON'S

SKIN CURE

Is Warranted to Cure

ECZEMA, TETTERS, HUMORS, INFLAMMATION, MILK CRUST, ALL ROUGH SCALY ERUPTIONS, DISEASES OF HAIR AND SCALP, SCROFULA ULCERS, PIMPLES, AND TENDER ITCHINGS on all parts of the body.

It makes the skin white, soft and smooth; removes tan and freckles, and is the BEST toilet dressing in THE WORLD. Elegantly put up, two bottles in one package, consisting of both internal and external treatment. All first class druggists have it. Price \$1. per package.

WHEELER & WILSON'S

NEW LOCK STITCH

Sewing Machines,



WITH ROTARY HOOK, STRAIGHT NEEDLE, INDEPENDENT TAKE-UP, AUTOMATIC UNDER-TENSION, AND IMPROVED FEED.

are declared by the highest authorities

"The Best Sewing Apparatus IN THE WORLD."

Factory & Chief Office, N. Y. Office, 44 E. 14 St., Bridgeport, Conn. (Union Square.)

MINERALS, SCIENTIFIC & MEDICAL BOOKS.

And all objects of NATURAL HISTORY are bought, sold and exchanged

BY A. H. FOOTE, M. D.

No. 1223 Belmont Avenue, Philadelphia, Penna.

N. Y. BRANCH, for local business only, 191 Greenwich Street.

(Professor of Chemistry and Mineralogy; Fellow of the American Association for the Advancement of Science; member of the Academy of Nat. Sciences, Phila., and American Museum of Nat. Hist., Central Park, N. Y. C.) Specimens sent to any part of the world by mail. Specimen copy of the illustrated monthly Naturalist's Hour of 32 pages sent free. Subscription 75 cents a year, for club rates and premiums see each monthly issue. I received the highest award given to any one at the Centennial Exposition of 1876, and the only award and given to any American for "Collections of Minerals."



My Mineralogical Catalogue of 100 pages is sent post-paid on receipt of 25 cents, heavy paper 50 cents, cloth 75 cents, 1/2 sheep \$1, 1/2 calf \$1.25, cloth interleaved \$1.25, 1/2 sheep interleaved \$1.50, 1/2 calf interleaved \$1.75, alone, 16 pp. 3 cents. It is profusely illustrated, and the printer and engraver charged me about \$1,100 before was struck off. By means of the table of species and accompanying tables most species may be verified. The price an excellent check list, containing the names of all the species, and the more common varieties, arranged alphabetically and preceded by the species number. The species number indicates the place of any mineral in the table of after it will be found the species name, composition, strata or lustre, cleavage or fracture, hardness, specific gravity, fusibility and crystallization. I have very many species not on the price list, and some that I had in 1876 are now in stock.

COLLECTIONS OF MINERALS for Students, Amateurs, Professors, Physicians, et al.

The collections of 100 illustrate all the principal species and all the grand subdivisions in Dana and other Mineralogy; all the principal Ores, &c., &c. The collections are labelled with printed label that can only be by soaking. The labels of the \$5.00 and higher priced collections give Dana's species number, the name, locality, most cases, the composition of the Mineral; the \$5.00, and higher, are also accompanied by my illustrated Catalogue table of species. The sizes given are average; some smaller, many larger.

DRIVE OUT THE BAD READING.

THE SCHOLAR'S COMPANION

A BEAUTIFUL MONTHLY PAPER FOR SCHOLARS.

Only 50 Cents a Year.

THIS PAPER IS DESIGNED TO PROMOTE SELF-EDUCATION SELF-IMPROVEMENT AMONG ITS READERS.

It will encourage a SPIRIT OF INVESTIGATION, the accumulation of NEW IDEAS, and inspire every reader with a desire to be BRIGHTER and BETTER.

It is in fact, an Ideal School in which the pupils are the scholars. Questions are given out, the best answers are announced, prizes are sent by mail each month, and at the end of the year.

It has fresh dialogues and declamations, stories of school life, boyhood of eminent men, and a great variety of interesting and valuable materials suitable for

SUPPLEMENTARY READING.

No teacher should fail to introduce it among his pupils, for it contains reading that will both INTEREST and EDUCATE them. Heretofore, the teacher has taught his pupil to read, and then he has read whatever comes handy, and too often he has been ruined by his power to read. Now, it is felt that the pupil must be assisted to employ aright this new power. He must be advised WHAT TO READ; more than that the proper reading must be put in his hands. George Washington went out with his hatchet and cut into the first thing he could find—and this proved to be his father's cherry-tree. Thus the pupil comes out of the school with the ability to read and seizes on the "Red Rovers of the Prairies," etc.

Let the teacher then advise the pupil to read the beautiful, instructive, interesting and educating SCHOLAR'S COMPANION.

It is CHEAP—fifty cents a year—making for the year an amount of reading equal to an ordinary book of 800 pages.

It is already taken in many thousand school-rooms, and all express themselves delighted.

Leading teachers and clergymen every where commend it. Rev. Drs. Deane and Burchard, Supt. Kiddle, President Hunter, New York Tribune—in fact every body says "it is admirable."

Teachers, send for a copy, and introduce it among your pupils. You will only be sorry you did not have it before. You ought to encourage such an enterprise. You have seen with deep regret that your pupils have seized upon vicious literature, and lamented that there was nothing to put in their hands. Here is just what they need.

E. L. KELLOGG & CO.,

EDUCATIONAL PUBLISHERS,

31 Park Place, New York

The School Journal.

Entered at the New York Post Office for transmission through the mails as SECOND CLASS MATTER.

ESTABLISHED 1870.

THE SCHOOL JOURNAL,

A Weekly Journal of Education.

AMOS M. KELLOGG, Editor.

E. L. KELLOGG & CO., Educational Publishers,

21 PARK PLACE, NEW YORK.

TERMS.

From 1 to 5 copies a year, each, - - - - -	\$2.00
" 5 to 9 copies to one address, each, - - - - -	1.75
" 10 to 19 copies to one address, each, - - - - -	1.50
20 or more copies to one address, - - - - -	1.25

The label on each paper shows up to what date the subscriber has paid. If the publishers do not by that date receive a request from the subscriber that the paper be discontinued, he will continue to send it. The paper will, however, be stopped at any time thereafter if the subscriber so desires, and remits the amount due for the time he has received it.

Subscriptions for any portion of a year will be received.

If the papers for a club are to be sent to one address, the publisher desires to have for reference the names of all the subscribers. He therefore requires that each club subscription be accompanied by a list of the names and addresses of the persons who are to use the paper.

Subscribers asking to have the direction of a paper changed should be careful to name not only the post-office to which they wish it sent, but also the one to which it has been sent. All addresses should include both county and state.

Any person writing to renew either a single or club subscription in connection with which his name has not before been known to the publisher, will please give the name of the person to whom the paper or papers have heretofore been sent.

Subscribers wishing to introduce THE JOURNAL to their friends can have specimen copies sent free from this office to any address.

Advertising rates 20 cents per line, Nonpareil measure, 12 lines to the inch. Nothing inserted for less than \$1.00.

OUR EASTERN AGENCY.—THE SCHOOL JOURNAL and all of our publications can be obtained of Mr. Willard Small, No. 14 Bromfield St., Boston. He will receive subscriptions for the SCHOOL JOURNAL, TEACHERS' INSTITUTE, and SCHOLAR'S COMPANION, and act as general agent for our publications.

CONTENTS OF THIS NUMBER.

EDITORIAL.	Page
A Knowledge of Nature.....	3
Industrial Education in Philadelphia.....	4
German Schools.....	4
Can Our Schools Prosper if Run by Politicians.....	5
Facts and Fables.....	5
THE SCHOOL-ROOM.	
The Primary Class.....	6
Lessons in Sewing.....	6
Occupation for Young Children in Schools.....	6
The School-Room Walls.....	6
Look not Backward.....	7
Lessons in Weight.....	7
Evening School No. 12.....	7

EDUCATIONAL NOTES.	Page
New York City.....	8
Elsewhere.....	8
LETTERS.	
The Teacher's Art of Putting Things.....	8
EDUCATIONAL MISCELLANY.	
Born to Teach.....	9
In the Kindergarten.....	9
Physical Education.....	10
Names of Countries.....	10
School Teachers.....	10
Science in the School.....	11
FOR THE SCHOLARS.	
Gathering Hazelnuts.....	11
How to be Handsome.....	11
Sights in New York City.....	11
BOOK DEPARTMENT.	
New Books.....	12

New York, November 5, 1881.

THE power of an approving word, or of a harsh one, cannot be over-emphasized. It is not for children alone that words are potent for help or harm. We are all children in this matter—always children. As Emerson puts it: "No man has a prosperity so high or firm but two or three words can dishearten it. There is no calamity which right words will not beg in to redress."—S. S. Times.

In the cities the public schools are divided into two classes, primary and grammar schools. The descriptive term, "grammar," was well enough when it was first employed. The chief business of the pupil was the study of Latin grammar; when Latin was shaken off the term was continued, for the boys were put into English grammar. But grammar has had its day—there is less and less of it taught every year. Why, then, absurdly call these departments grammar schools? They

are Advanced Primary Schools; take away "grammar," then, and call them "Advanced" schools. We have three classes of schools, Primary Schools, Secondary (High) Schools, and Colleges.

WHETHER the teacher is happy in his work or not depends upon the way in which he does it, or rather the motive that impels him. The man who goes to his task reluctantly, like a scourged slave, has no enjoyment in his labor. It is, to him, like a perpetual punishment. How slowly, to his eyes, the sun rises in its zenith! How slowly it sinks to the western horizon! With leaden feet the weary hours go by. And he dreads the morrow which is to be but a repetition of the dreary to-day. His sluggish pulse does hardly beat. He seems but half alive. How different it is with the man who works with a will! Whatever he touches at once becomes interesting to him. He is absorbed in what he is about, and he exclaims at night, "How short the day has seemed!" Not an hour has hung heavily on his hands.

"Good lessons to-day, or a strapping."

This, says a New Haven paper, was the opening address made by a teacher in that city to a school in which the oldest pupil was not over eight years of age. And yet most people suppose the educational millenium has been reached. "What elegant buildings!" they say, "what beautiful furniture!" "what finely-illustrated text-books!" Yes, yes, but the teachers, what of them? Are they nobly planned? Are they in sympathy with the children? Do they understand what education is?

"Good lessons!" When will the teacher cease to confound lesson-hearing and teaching. "Come and recite your lessons," "Have you recited your lessons?" are common expressions; they show which way the wind blows. The poor teacher hears lessons; he demands good lessons; he threatens dire punishment if the lessons are not learned. And the lesson-mill is grinding away at about as fearful a rate as ever, and yet this the nineteenth century!"

PROF. ALLEN, who has been so long identified with the educational matters of this State, has been appointed Principal of the Minnesota State Normal School, at St. Cloud. We announce this with regret, for we lose thus one of our ablest men, but yet with satisfaction, for Minnesota secures a most competent man. If Professor Allen had merely the scholarship needful for the position we should mourn over the future of the St. Cloud Normal School. But he is a man who understands the science and art of teaching, and he will see that they are taught. We feel sure that he will do a lasting and widespread good to the whole Northwest.

Last year Prof. Allen was President of the N. Y. State Teachers' Association, and his address was one of the most earnest delivered by any who have held that office. His post at the Geneseo Normal School has been

at the head of the scientific department, and he has done excellent service in it. He is a teacher by sincere convictions; he will not be merely a position-holder and a salary-drawer. Fortunate are the Minnesota people in escaping those who, having been in academies, union schools, etc., for a time, look on the normal schools as simply positions offering higher pay, and, therefore, just what they need. Prof. Allen has been worthy of and qualified for his post by long and arduous labors. We sincerely hope he may accomplish the ardent desires of his heart for the teachers of Minnesota.

HERE is an incident that occurred in Sullivan County. A farmer's son "reckoned he would teach;" went off one wet day, when he could not plough, got a certificate; got a school a half dozen miles from home; kept at work until the Saturday night preceding the Monday upon which school was to open; presented himself on Monday, heard classes read, spell, etc., kept the roll; "kept 'em still," didn't lose a day; drew his pay; closed school on a Friday night and began work on the next Monday morning on the farm.

Just how many similar incidents occurred in the great Empire State, will not appear in any commissioner's report, nor are they alluded to in the report of the committee on the "Progress of Education," which yearly comes before the State Teachers' Association. In one case in Oneida County the teacher went home daily at noon to feed his hogs! This fact was well known to the pupils and they would say as he took his hat "C—is going to feed his shoats."

If Prof. Allen, chairman of the committee "to advance education" would make a report of things as they are it might lead to a reform. The parents are used to this kind of thing; they think it part of the system! And the children—why they suppose it all right; have not their fathers and mothers planned out the thing for their benefit? The truth is that the benefit is all in the pocket of the young man who draws the pay. The country spends a pile of money to educate its children and doesn't do it.

A KNOWLEDGE OF NATURE.

"I wish to awaken a conviction that the knowledge of nature in our day lies at the very foundation of the prosperity of states; that the study of the phenomena of nature is one of the most efficient means for the development of the human faculties, and that, on these grounds it is highly important that this branch of education should be introduced into our schools as soon as possible. To satisfy you how important the study of nature is to the community at large, I need only allude to the manner in which, in modern times, man has learned to control the forces of nature, and to work out the material which our earth produces. The importance of that knowledge is everywhere manifested to us. And I can refer to no better evidence to prove that there is hardly any

other training better fitted to develop the highest faculties of man than by alluding to that venerable old man, Humboldt, who was the embodiment of the most extensive human knowledge in our day, who acquired that position, and became an object of reverence throughout the world, merely by his devotion to the study of nature. If it be true, then, that a knowledge of nature is so important for the welfare of the states, and for the training of men to such high positions among their fellows, by the development of their best faculties, how desirable that such a study should form a part of all education! And I trust that the time when it will be introduced into our schools will be only so far remote as is necessary for the preparation of teachers capable of imparting that instruction in the most elementary form. The only difficulty is to find teachers equal to the task—for, in my estimation, the elementary instruction is the most difficult. It is a mistaken view with many that a teacher is always sufficiently prepared to impart the first elementary instruction to those intrusted to his care. Nothing can be farther from the truth; and I believe that in intrusting the instruction of the young to incompetent teachers the opportunity is frequently lost of unfolding the highest capacities of the pupil by not attending at once to their wants. I have been a teacher since I was fifteen years of age, and I am a teacher still, and I hope I shall be a teacher all my life. I do love to teach; and there is nothing so pleasant to me as to develop the faculties of my fellow-beings, who, in their early age, are entrusted to my care; and I am satisfied that there are branches of knowledge which are better taught without books than with them. There are some cases so obvious that I wonder why it is that teachers always resort to books when they teach some new branch in their schools. When we would study natural history, instead of books, let us take specimens—stone, minerals, crystals. When we would study plants, let us go to the plants themselves, and not to the books describing them. When we would study animals, let us observe animals.”—AGASSIZ.

For the SCHOOL JOURNAL

INDUSTRIAL EDUCATION IN PHILADELPHIA.

BY CHAS. G. LELAND, Philadelphia.

The experiment of introducing hand work into our public schools has succeeded beyond the most sanguine anticipations. It is a fact, there is in every large city of the Union (Philadelphia alone excepted) a Ladies' Decorative Art Association, in which other branches besides needle-work are so practised, that the undertaking is a pecuniary success, or at least self-supporting. Now, what can be done by grown-up women in "decorative art"—I do not mean high art—can be done as well by children. Even the ladies' associations in America do not produce any better wood-carving, needle-work, and metal work than I have seen executed by mere infants in Italy and in the East. It was, indeed, in Egypt, and in Miss Whateley's school in Cairo, that I first clearly saw the immense advantage which would result from making hand-work an integral part of all education in all schools. With that idea, in my frequent visits to the Continent of late years I continually gathered facts and investigated every source of industry to aid me in realizing it.

The first question connected with such work is generally to the effect that it adds another branch to the already overgrown curriculum of school studies. To this I reply that I have thus far found that the children regard such drawing as we give,

painting, carving, and modeling in clay, as the most agreeable of occupations, and are glad to come on holiday afternoons to thus pass the time. In drawing, the children, as soon as they can copy simple patterns and draw a line decently, are taught to design and draw together. Thus, having copied an ivy leaf, they are requested to draw a wreath of such leaves, or dispose them in a wave line, or spiral, etc. I find that this interests them far more than the old plan of continually copying. Those who have not tried it will be astonished at the degree of inventiveness and cleverness which even little girls develop in it. If a common-place *motive* is given them they produce a common-place variation; if they are given Celtic or Romanesque patterns they fall into a Celtic or Norman style very easily. In wood-carving we have not got beyond surface-cutting, but no boy has as yet spoiled a panel. In working sheet leather, *cuir bouilli*, embossing sheet brass, painting and art needle-work, there is the same success. The work is rudimentary—not in the least like machine work (for which I am, however, thankful), but is all fairly good—good enough to use for household decoration. There is no pupil who could not now, or who will not be able in a short time, to produce something saleable. I have just received \$13 from a lady which I am to pay to one of my teacher-pupils for two brass panels, and have other orders. But there are many of the children who could do precisely the same work.

It is not generally understood that every child not an idiot, can learn to draw when properly taught, and that all the minor arts, such as carving, sheet-leather stamping, embossing in metal (or repousse-work) are only drawings worked with other implements in other substances. In fact, they are all easier than drawing, as is shown by the great repugnance of grown-up women pupils to undertake preparatory studies in designing.

These are the results of a few weeks' instruction under very great disadvantages, such as extremely limited means, of being obliged to beg the gratuitous services of most of our teachers, and an almost entire local apathy as to what is being done by us. The *New York Herald* was the first newspaper which sent a reporter to give a detailed account of our school, and since that time I have received, in consequence, almost every day, letters from all parts of the Union asking for information regarding it. I beg your readers to observe that we make no effort to create "artists" or drawing-masters, or to make "pictures." This was considered under the old system of teaching "art" in schools as the legitimate and only result of learning to draw or paint. My aim, never lost sight of and constantly kept before the pupils, is that they shall learn to use their hands and brains practically, so that they may be better qualified to become mechanics and artisans. It is a fact that the easiest and quickest way to plain sewing (which is not the easiest branch of needle-work) lies through crewel-work and outline embroidery, because children like the latter best, learn it soonest, and in learning acquire familiarity with the needle. When I was asked by a practical carpenter once what we intended to teach in our school, I replied, "We intend giving an aesthetic artistic education in decorative work. And if any of the boys should prove to be very clever we will make carpenters of them," which was perfectly satisfactory.

I continually hear from people who examine the school; "This is all very well, but what is to come of it?" They can not admit that there is anything "practical" in these decorative arts. To be sure sixty per cent. of all the money spent in building and furnishing the homes of America goes for nothing but ornament or decoration, and yet the majority of examiners wish to know what is the practical use of teaching design and its application. A direct answer may also be found in the fact that so few people can design or copy a pattern, mend or repair injured objects, or perform any of the many jobs or effect any of the small manufactures required in every household. How many again are there who can with their own hands prepare accep-

table gifts? How many can in an emergency make anything that will bring them in a few dollars? I think that if children, without injury to their other studies, can do this, if nothing more, there is a very practical object effected.

There are, however, many others who ask if children can be taught the decorative arts, why can they not as well as learn trades? "Here," they say, "is something positively practical." But it is really impracticable. Printing, shoemaking, metal filing have all been tried and with what success? Strong boys can it is true be trained in a separate industrial school, but to learn a *trade* there is required far more muscle, brain and time, than is compatible with education of the intellect, a book-culture in children. Now, the minor arts, after a little practice in drawing, can be nearly all learned almost at once. This is far from being generally understood. When properly taught, a boy or girl invariably produces at the first trial a carved panel or a brass *repousse plaque* or a *basse relievo* in clay, which would find a purchaser. If any doubt this I shall be happy to show them specimens of the work of beginners at our school. And with practice very small children who could never learn a trade easily acquire minor arts. In Switzerland and especially in Italy, beautiful wood-carving, mosaic-laying, etc. is done by little ones, even six years of age. I have seen, myself, in Egypt, boys from twelve to fourteen years of age making beautiful jewelry, and children of six and eight at equally artistic work. And I believe that American children are as clever as their Swiss, Italian or Arab brothers and sisters.

I would say in conclusion that I shall be most happy to confer or correspond with any persons desirous of introducing industrial art-work into any schools anywhere. I make the offer because I know perfectly well that if I could have availed myself in another person of the experience which I have acquired since I began the experiment, I should have been spared three quarters of such troubles as I have had in connection with it.

I have found it absolutely necessary to prepare manuals of the minor arts which are suitable to such teaching, and these are now being published at a very cheap rate for school use by Messrs. Whitlock & Turnure, at 140 Nassau Street, New York. It was solely owing to their previous publication in England that a number of industrial village schools were formed in that country, where they are extending and prospering.

For the SCHOOL JOURNAL.

GERMAN SCHOOLS.

BY H. WANNER, Hanover, Germany.
Editor of the *Schul Zeitung*.

Since March, I have belonged to the readers of your SCHOOL JOURNAL, and it has been very interesting to me, to know how my fellow teachers in America work in school and at home. With satisfaction I learned that on the other side of the Atlantic, the teachers endeavored to push themselves to a higher degree of excellence and to find out the best method of the art of education, as we do here in Germany.

We have three classes of schools.

1. Public schools or local schools, (*Volks Schule*), the lower class of schools for children, boys and girls, from the 6th to the 14th year. They are kept either by the state or by the political community, but all surveyed by the state, the teachers being civil officers and paid by the state or the political community. In villages, and sometimes in small towns, they are connected with the parish, but in greater towns never; in villages the public schools generally have one class, if the number of the pupils reaches 80, a second class must be established. In greater towns, (as here in Hanover) this kind of schools have six classes for boys and six for girls, both sexes separated. Things taught in public schools are: Religion, German, Arithmetic, History, Geography, Calligraphy, Singing, Drawing and Gymnastics—no military tactics! no drilling!—In the two upper classes of boys they study rudiments of geometry and physics, and in

each class of girls knitting and needlework. Every child in Germany is obliged by the school-law to attend a public school.

2. Middle-schools, or generally called *Higher schools*. There are three sorts of them.

a. The lowest: *Hohere Burger Schule*. I cannot give you a proper translation of this word. They have besides three preparing classes, in which boys from their 6th unto their 9th year are taught, *six classes*. Pupils generally leave this school in their 17th or 18th year, after having passed an examination before a commission of the state, and they gain by virtue of their certificates the right of omitting one year's military service. We have two sorts of "*Hohere Burger Schule*," the one with Latin, the other without. The "*Hohere Burger Schule* in Hanover teaches no Latin, that in Uelzen does. *Hohere Burger Schule* with Latin is equal to a *Real-Schule* of the first order, with the uppermost class (*Prima*).

b. *Real Schule*. They have besides three preparing classes, nine real classes; boys leave them in their 18th or 20th year; they gain in the second class (*Secunda*) the right of omitting one year's service and after the examination they are admitted to study mathematics, natural philosophy, modern languages in the universities or engineering and architecture in the polytechnic schools; many of them also become merchants.

c. *Gymnasium* or *Lyceum* is the highest class of "middle-schools" or higher schools. The difference between *Real Schule* and *Gymnasium* is that in the *Gymnasium* the whole study is based on the ancient classical languages, as: Greek, Latin, Hebrew, and in *Real Schule* on modern languages, natural philosophy, and mathematics. After the examination pupils leave the school to finish their study in universities.

3. *High-school, or University*. Each university has four "faculties." Theology, jurisprudence, Medicine and Philosophy.

School tuition differs very much; in public schools pupils pay from 3 to 12, 16 M. a year. *Hohere Burger Schule* 60 to 90 M. *Real Schule* nearly the same. *Gymnasium* 60 to 120 M. Tuition is paid *only for instruction*; books, and all other things used in school by the pupils they pay for themselves.

For the SCHOOL JOURNAL.

CAN OUR SCHOOLS PROSPER IF RUN BY POLITICIANS.

BY IVAN.

A great many truthful things have already been said in the columns of the JOURNAL, relative to the folly of such filling of school offices, as has been too universal in the past.

It is impossible that the justice of such remarks has been unnoted by serious readers. Being one of the most important of these offices, the School Commissionership stands a prominent illustration of the folly permitted, and the wrong often done at elections. How many teachers must respond affirmatively to the statement that the Commissioner in charge of their District has never been of the slightest service to them in their work. How many in their hearts answer, "yes," to the statement that the only regard or respect they hold for their Commissioner, is due to the fact that he can give them, or deprive them of their certificates. How many must in truth say that they look with gratitude, not respect, upon a Commissioner, who sent them certificates without a personal examination.

Do not teachers know that these things are true?

Does not every good teacher wish from his heart that it were otherwise?

The Office of School Commissioner is in many Counties of New York State considered to be a mere sinecure, the nomination for that office being given in many instances to individuals not possessing a single qualification which should recommend him for the office. The average politician find no objection to him in the fact that he is an habitual swearer, or that he drinks occasionally, or he attends places of low amusement. Those who nominate him do not inquire so strictly into his qualifications, as to make public what is enough for them to know, that

he could not to save his life stand an examination for a second grade certificate. Nor do they seek to discover if he has any idea at all in regard to general education. Some fellow has done the party a good turn, and he is rewarded with the commissionership, which is a first class office since it pays pretty well, and will not take up much time, so that it need not interfere with any other business he may have.

What cares this man for the good of the schools?

What cares he how sorely teachers are tried, or how sadly they neglect? What heed does he pay to new ideas or advanced methods?

Wrapped in a cloak of party influence, he smiles and cogitates; "If the party be for me, who can be against me."

Opposed to this too sadly truthful picture of what we see, is the ideal commissioner so seldom met, yet always looked for by those who reflect seriously and intelligently upon the real duties of the office, and the influence which may flow therefrom. A man of broad culture and a heart full of sympathy with our schools; one who will devote his whole time and energies to the superintendence of our schools; being ready to examine in the light of reason with the test of experience, improved methods and to encourage all efforts to step forward in the line of progress.

One in full sympathy with, and able to aid by advice and encouragement, every faithful, industrious teacher—who, anxious to perform well the responsible duties of her position, is yet lacking in the knowledge and skill necessary to success.

One who will consider the normal character of the teacher of paramount importance, and who in granting licenses will have little respect for political effect, and much love for the cause of education.

With such Commissioners how much good might be effected in our schools.

Now the question appears, "what can we do about the matter?" It does seem that we can do a good deal.

To very many who cast a vote in the election of School Commissioner, the real object of selecting such an officer is but a vague affair.

They are easily led by political wire-pullers because they don't understand what they are doing. They ought to know but they have so many other things to attend to.

If every intelligent teacher, male or female will make an effort to cause the voters in his or her district to see how great an interest they have in this matter, much will have been accomplished, for intelligence but preceeds reform.

From the point of view herein taken, the next few days are important ones to the schools of this State.

Having studied carefully the characters of the men nominated for the office, it is the duty of every one who votes, to use his influence to place in the office of Commissioner of schools, the *best man irrespective of party*.

Does not this look reasonable?

Is not this a time for taking a broader view of the relation which this office holds toward the people? Let us make a united effort in this direction, and see what good will come.

For the SCHOOL JOURNAL.

FACTS AND FABLES.

FOR WHOM THEY MAY CONCERN.

BY B. A. BROOKS.

I.

Ernestus Pedagogius was a country teacher who had long turned a longing eye towards the schools of the metropolis. "There," said he, "where money is poured out like water and education is reduced to a science, the pedagogue must be appreciated. There I could teach with enthusiasm and delight." His dream was realized. He secured a position in the city schools. Not without some personal and political wire pulling; "but once in," thought he, "I shall be able to exercise my ability and show my zeal as a teacher." He worked, he talked, he thought; he employed every endeavor to arouse interest in his pupils and to awaken their minds. It was a difficult task. There was a

vis-inertia to be overcome, which was most discouraging. No advice or encouragement was received from his superiors. Still by unceasing patience and toil, he succeeded in making some impression, and elevating somewhat the standard of instruction in his department, and he expected with confidence the approval of the examiners. But, instead came condemnation. His pupils, averages were not up to the standard. He had tried to make his pupils understand their lessons, which did not appear in the marks. He had taught too much and too well; he nearly lost his place. But being shrewd enough to recognize the situation, he instantly "reformed," stopped teaching and began hearing lessons and bending all his energies to preparing his pupils for examination. He found his proper hole in the machine, dropped in, and now, like the "one hoss shay" it is running as usual, much the same.

Hæc Fabula docet. Be not too anxious to excel lest by superior excellence you interfere with the existing order of things and lose your own head.

II.

A young porker on his way to the shambles passed a show where he saw an educated pig. "I will see what this may be," said he, and entering he saw his brother pick up cards, tell the time and do other diverting things which brought him much consideration and kindness. "Tell me," said Porker, "how you came to be treated so well while I am driven to the butchers?" "It is because I am educated," was the reply. "And how may I be educated?" "Go to school." So young porker hastened to the nearest school and took his place in the class. He was forced to sit in an unnatural position on a bench among blockheads and idiots, as they were called. A book was put into his hands on whose unmeaning characters he was compelled to fix his gaze until he understood them. When he was not able to learn them, he was flogged and stood in a corner, while epithets were applied to him which no self-respecting pig could endure. After a few weeks of this torture, he departed saying, "Take me to the butchers, I would rather make good sausages than be educated, if that is education."

MORAL.—There is education and education.

SEEING that I was obliged to teach the children without any assistants, I learned the art of teaching many at once; and as I had no means of instructing except by the living first, saying first what they were to repeat after me, naturally fell upon the idea of having them draw, write and work while learning. Their entire ignorance of everything obliged me to *tarry long among first principles*, and this led me to realize the heightened inner power acquired by the thorough appropriation of *first principles* and the result of a consciousness of completeness and perfection even in the lowest grades. I became aware, as never before, of the intimate connection and inter-dependence existing between the first principles of every science and its complete outline, and also to feel as never before the vast chasms that must be produced in every succession of intellectual acquisitions by the confusion and noncompletion of first steps. The result of my attention to this far exceeded my expectation; a consciousness of power which they did not know, and especially a general sense of beauty and order quickly developed itself in the children. They were conscious of themselves, and the feeling of wearisomeness usual in school, vanished like a ghost out of my rooms. They could, would persevere, complete and laugh; theirs was not the feeling of those who are forced to learn through coercion—it was the feeling of awaked and unknown powers—a mind and heart elevating feeling whither these powers would conduct them.—PESTALOZZI.

LUMINOUS METEORS.—At the recent session of the British Association, York, Prof. A. S. Herschel read the report of the committee on luminous meteors, in the course of which he referred to the aerolite which fell near Middlesbrough this year and embedded itself to a considerable depth in the earth.

THE SCHOOL-ROOM.

For the SCHOOL JOURNAL.

THE PRIMARY CLASS.

LESSONS ON THE BODY.—THE CARE OF THE EYE.

What is the use of the eye? Through it we see the beauties of nature, the blue sky, the green trees, the flowers of varied color, the sun, moon and stars, the faces of our friends. How many of these things would we see if we were blind? None. Name the things of which a blind person can know nothing. *Desk, table, chair.* No. He can know of these by feeling, but not so of the sun, or stars, or sky. He cannot read our books nor walk alone. It is always night with him. Our eyes, then, are very valuable, and we ought to guard the door which opens to us so many glimpses of beauty. The eyes should be carefully taken care of; they ought always to be kept clean and cool. The eyelashes brush the dust away from the eyes. The eyebrows keep the perspiration from rolling into the eyes. The eyelids protect the eyes from dust. We should read by day-light. The light should fall over the left shoulder, and upon the page, not upon the face of the reader. The elbow should be gently bent, and the book held about three-quarters the length of the arm from the eye. If we hold the book nearer we shall grow near-sighted. We ought never to strain the eyes to read fine print; and when we read we ought to sit erect.

LESSONS ON MORALS.—CHEERFULNESS.

On the grassy hill-side grew a little daisy, with a golden centre and white leaflets. It was only tall enough to merely peek out over the grass into the wide, wide world. It was only large enough to cover an inch of the soil. But the sun beamed kindly upon it; the dew cooled its parched throat, the wind sported with it, blowing it gently hither and thither; the soil nourished it through its stem. It was a tiny little thing, but all nature did its very best to keep the daisy alive. And for this the flower was grateful. To be sure, there were larger flowers near it, flowers of gay colors and sweet perfumes; but the daisy was not jealous. "My part in life is small, but I shall perform it well," it said. "I shall be very fresh and cheerful always. The children will love me, and they will pluck me and weave me into a garland for their young brows. But I shall be cheerful always." Was not that sweet language? Yet we have far more things than the daisy. Are we grateful? What had the daisy to be grateful for? What did the daisy say about its part in life? How does the daisy perform its part? Is it right to be cheerful? What have children to be grateful for? How should children perform their part in life?

LESSONS IN LITERATURE. HANS CHRISTIAN ANDERSEN.

"It was yesterday, in the morning twilight," these are the words the moon told me. "In the great city no chimney was yet smoking, and it was just at the chimneys that I was looking. Suddenly a little head emerged from one of them and then half a body, the arms resting on the rim of the chimney-pot. 'Ya-hip! ya-hip!' cried a voice. It was the little chimney-sweeper, who had for the first time in his life crept through a chimney and stuck out his head at the top. 'Ya-hip! ya-hip!' Yes, certainly that was a very different thing from creeping about in the dark, narrow chimneys! The air blew so fresh, and he could look over the whole city towards the green wood. The sun was just rising. It shone round and great, just in his face, that beamed with triumph, though it was very prettily blacked with soot.

"The whole town can see me now," he exclaimed, "and the moon can see me now, and the sun too. Ya-hip! ya-hip!" And he flourished his broom in triumph.

Now who wrote that? You must know who is such a friend of children. It was Hans Christian Andersen. Have you read his beautiful stories about the "Sand-hills of Jutland," "The Flying Trunk" and "Charming"? I must tell you about him. He was the son of a poor shoemaker who lived in Denmark. While yet a child he showed that he possessed great talent. He had a lovely character, which won him countless friends. When he was about five years old his father died, and Hans had to go to work. Hans never cared for active sports; he would stay at home to read when other boys were at

play. While at the University of Copenhagen he began to write poems, stories and plays. The many sorrows and conflicts of his life did not make him bitter and cross; they only served to make him more kind and sweet. When he died all the world mourned. Mary Mapes Dodge has written a beautiful poem about Andersen. I quote one verse:

"There is joy among the angels. To that bright company
One cometh as a little child—all gladly cometh he!
Our Lord hath lifted off his load, hath led him to the light,
And happy spirits, welcoming, lead up the pathway bright.
How shall the ransomed poet hear the holy, glorious song,
The grand, eternal story he hath waited for so long!
O children! ye who love his name, wait on and watch and pray,
In reverent thought still honor him the Lord hath called
this day."

For the SCHOOL JOURNAL.

LESSONS IN SEWING.

The idea has often been advanced that sewing ought to be taught in our public schools. It certainly would be a very good thing; but to me it seems impracticable with our limited time and numberless children, unless it can come under the head of "amusements for children," and can be managed without the immediate supervision of the teacher. The first thing to teach children in the sewing line, is the way to hold the needle, and it is quite essential that they have sufficient practice on some coarse work, to give them the ability to place the needle where they want it to go. A good way of teaching this in school is to take paper—brown wrapping paper is good, that which dry-goods merchants use—and cut it in squares, fold each square through diagonally, and then through again twice. Put a long stitch on your sewing machine (surely every house has one), and run each folded paper through just as it occurs to you, and when you unfold them you will find that you have some very pretty patterns marked out. Then buy a paper of small darning needles, and hunt up all your odds and ends of worsted yarn, or even yellow, blue, and pink cords, that every one has more or less of. If you have zephyr, split it, it will go twice as far, and is just as good. Select one of your most advanced girls and teach her how to thread the needles, and also how to work the worsted in the pattern, and place her at the head of the sewing department. The children will learn very rapidly that they must put the needle through each hole in the paper as they come to it, and that they must not skip any.

If, when these mats are finished, you will pin them up on the wall in groups, you will be surprised at their pretty effect. This is very fine for boys as well as girls. They will feel comical at first over their employment, and be rather more awkward than the girls, but they soon will be as much pleased with it and as expert. It is not a waste of time for them either, as it is the very best way in the world to teach them to sew on buttons, and, certainly a boy's education is very deficient if he has not that feminine accomplishment. One important thing I would add, and that is, be sure and write each pupil's name on their mats, and number them as they make them, for it will make it seem more important to them, and they will try harder to make their work neat and presentable.

After this is nicely started in any school it is not very much work, but it is very effective in insuring quiet while recitation is being conducted.

For the SCHOOL JOURNAL.

OCCUPATION FOR YOUNG CHILDREN IN SCHOOLS.

BY ANNA JOHNSON.

NO. XIII.—TIME EXERCISE.

The children may each be provided with a clock dial, which may be made in the following manner. Take paste-board or boxes and cut into pieces about eight inches square. With a string and very dark pencil make two large circles about one inch apart on each; between these circles make the Roman numbers as found on the clock; making the minute marks between. Cut out paste-board hands, fasten two, the minute and hour, in the centre of each, just loose enough to be moved with ease.

The teacher may have a clock for her own use or make the dial on the board similar to the children's. The teacher may ask what the cards represent and what kind of numbers found on them.

The children may point to the Roman numbers, naming each.

The teacher may then ask the children to name some length of time, and then ask how that is represented on the clock; or ask the shortest period of time and refer to the second hand of her watch, then the next longer period and how that is represented. Ask what number they could count to take a minute in time. Ask how long a second is, what they could do in a second. Refer to pendulum; show by vibrating something, so they will comprehend the length of time. Ask how many seconds make a minute. What part of the clock points to the time; what difference they notice in the hands; which hand points to the minute. Ask for the next longer period of time; how many minutes the long hand has to point to before it is an hour, how far around the clock it goes, how far for a half hour, for a quarter, for three quarters; let them count the minutes in each. If an even hour, ask where the minute hand would be, if a half hour, quarter, etc. Which is the hour hand? Have them point to each and tell their names.

Ask where the hour hand would be at each successive hour. If twelve o'clock where each hand would be; if one, two, three, etc. Have them tell how far the hour hand goes on the clock in one hour, how far the minute hand travels in same time. Ask how many hours, in one day; how many times the hour hand goes round in the day; the minute hand. Which hand goes fast? Which slow? What does the fast hand show; the slow hand?

Then have them set the hands at twelve, what time? at one, etc. Ask different ones what time it is and where the hands are. In setting even hours, which is the only hand to move? Then drill on half hours, quarters, five minutes, etc.

For review have all set certain time, and ask where hands are. Then let them set their own time, and state time and position of hands.

This may be taught to quite young children. The time table may be written on the board and learned by the children.

Show them how railroad time is given and written, and drill on it both orally and written.

Ask of what materials watches and clocks are made; how they are made to go; what has to be done to make them go. Give them some idea of the spring and wheels.

State the differences between clocks and watches.

Show a sun dial if possible, and tell them now time is told by that; how the correct time is known.

For the SCHOOL JOURNAL.

THE SCHOOL-ROOM WALLS.

BY W.

Some time ago a thought struck me; it was this: I had made my home as pretty as flowers and pictures would permit, but the walls of the class-room looked bare, and the general aspect of the room was uninviting. Why should not this be changed? Why should not my class-room be a pleasant or a pretty room to stay in? Why should not a love of beauty be acquired in it? With this idea I set out on an expedition to beg, borrow, or buy engravings for the walls. I interested the pupils and friends in the work. Cheap frames were made and cords procured, and one night after school the chromos and engravings were hung upon the walls. There was a portrait of Washington and Lincoln and three landscape chromos. Never shall I forget the surprise and delight with which the children on the following day welcomed the changed appearance of their class-room. It repaid me for all my toil.

HERE's a positive fact that occurred in one of the public schools in Philadelphia recently. A small boy was asked to name some part of his own body. He thought a moment and then replied: "Bowels, which are five in number—a, e, i, o and u, and sometimes w and y."

LOOK NOT BACKWARD.

We print a tune in Tonic Sol Fa Notation; the letters are the initials of do, ra, me fa, sol, la, ti, do; *ti* is used instead of *di* to prevent a repetition of the *s*. The time is indicated by the colons—periods etc. The above selection is a good school room song, and very suitable for the morning or opening exercises. The music is very simple and can easily be learned by all grades of pupils. Beginning with *me* or "me," the third tone of the scale, as given in the key of D, followed by *f*, making two tones for the last third of a measure, they should be sung to one or the up beat of triple measure. The time is so clearly set forth by the colons in the full measures that no mistake need be made as to the length of the tones. An accidental sharp is introduced near the end of the second strain, and represented by the syllable "fe." The perpendicular lines (|) are followed by the heavier accent; the two dots (:) are followed by the weaker accent. The dot (.) shows that the pulse or beat following is of the same length as the one before it. The dash (—) shows the sound is prolonged.

Key D.

From SONG BELLS.

treble	m	f	s	m	d	l	s	m	r	m	f	r	s	f
	Look not	back-ward!	'Tis be-	fore thee,	That the	glo-rious	good is							
base	d	d	d	d	d	d	d	d	s	s	s	s	s	s
	On ward	rides the	bright sun	o'er thee,	For-ward	rolls the	o-cean							
	d	d	d	d	d	d	d	d	d	d	d	r	r	r
	s	f	f	f	f	f	m	m	r	f	f	f	r	s
	yet	All great	soles are	true and	earn-est,	See the	bea-con	star a-						
	s	s	s	s	s	s	s	s	s	s	s	s	s	s
	m	m	f	s	s	d	s	l	l	l	l	s	m	r
	head; And the	strength for which thou	yearn-est,	Li-eth	not a-mong the	dead.								
	d	d	d	d	d	d	d	f	f	f	f	s	s	s

2. Look not backward!

Radiant shining,
Truth's bright sun adorns thy path,
Warms the heart that ne'er repining,
Fears not aught the future hath.
God, who guards the little sparrow,
As it falleth to the sod:
Joy will give thee for to-morrow,
If thy life be true to God.

3. Look not backward!

Onward pressing,
Mark thy path with noble deeds;
Patient toil will bring thee blessing,
Earnest labor forward leads.
Look not backward! 'Tis before thee
That the glorious good is set;
Onward rides the bright sun o'er thee,
Forward rolls the ocean yet.

For the SCHOOL JOURNAL.

LESSONS IN WEIGHT.

FOR THE ADVANCED CLASS.

The pupils should be familiarized with the metric weights, but many teachers do not have the apparatus. It is not too much to say that every teacher should own (if the school does not) a balance and a set of weights. Beginning with this, let every pupil make a balance and set of metric weights for himself.

Get sheet brass and cut into squares 3x3 inches; they can be shaped on wooden balls into a proper form; the beam can be made of wire and very neatly too and *all by the pupil*; insist on this or the good you are to do him will be small.

On the supposition that you have not a set of metric weights you can proceed as follows. The nickel five cent piece weighs just *five grains*; get a new one that has not been worn and put in one of your scale pans. Put in the other a piece of brass wire, (about the size used to fasten up stove pipes) and clip off with shears and a file until it exactly balances the five cent piece. Take this wire and divide it into five equal parts and you have *one gram* weights. In my school I used a strip of thin brass a little wider than a lead pencil; it makes nice weights, but all may not be able to get this. I shall be sorry if every teacher, man or woman does not follow out this *doing work*. It will teach and create an interest at the same time; I therefore give directions that *all* can follow. If you cannot get brass use a strip of lead cut from a sheet of lead. The division into five parts can be effected by a pair of dividers; separate the legs and see if five steps of the legs reach the end and lengthen and shorten until it does.

Next get a piece of fine brass wire and put in a sufficient length to balance the one gram weight. Cut this into ten parts—each of these is a *decigram*. Keep in a box two five cent pieces, (or make a ten gram weight); you thus have a *decigram*, a *gram*, and a *dekagram*. With these let the pupils weigh substances, as a stone, a piece of brick, crayon, etc.,

etc. Continue this until great readiness is secured.

Now, for liquid measures. First boil some water so as to make it pure, (an ingenious teacher can distill some water); pour it into a clear glass vessel; (I used a large glass molasses cup; it was good because it had a cover to keep out the dust). Put a clean test tube into one scale, and in the other enough sand to balance exactly; put on the sand a *gram* weight and pour into the test tube pure water to balance it: you have now a milliliter (or a cubic centimeter marked c. c. Or the two nickels will give centiliter. Pour this out ten times and you have a *deciliter* and by pouring this out ten times you will have a *liter*, a very important measure—it is about an U. S. quart (1.06.) liquid.

Suppose you have no meter, get 5 nickels and place them on a bar of wood; as each nickel is two centimetres in diameter, 5 nickels will measure 10 centimeters or one decimeter. Repeat this measure ten times and you have the meter (39.37) inches. It is not needful to convert these often into English measures, but if so, remember that the meter is 39.37 inches (3.3 inches over a yard) the liter 1.76 pints [$1\frac{1}{2}$ pints]: the gram 15.4 grains ($\frac{1}{8}$ of an ounce) the nickel (five) weighs $\frac{1}{4}$ of an ounce, hence six nickels or 30 grams weighs an ounce nearly.

I have said that each pupil should make his own measures. They will then have a balance with decigram, gram and dekagram weights; and by marking on the test tubes, etc., a milliliter, centiliter, deciliter and liter; also a centimeter, decimeter and meter.

The next thing will be to propose problems.

1st. Let each pupil bring in ten sticks tied up in a bundle marked with name and numbered 1, 2, 3, 4, etc. Let him measure the lengths and keep a record. Let him exchange with another pupil and let that pupil measure them with care. The next day let him repeat the measure and compare it with the length on record.

2d. Let another exchange be made and so go on; if there are twenty-five pupils there will be 25 problems. In this way they will *know* what is meant by meter, decimeter, centimeter, etc., etc.

3d. Let each pupil bring in ten objects, stones, pieces of brick, etc., etc. in a box; all must be numbered; the box marked with name; he must keep in a little book a record of the weights. Pass these to another pupil. After weighing them comparison can be made and each pupil will then learn whether he is correct or not.

4th. Let each pupil procure ten vials of different sizes and put in a quantity of water, measured by himself; these are numbered, put in a box marked with his name. Pass these to another pupil for his examination.

The only objection to this I know of are (1) It will "take time." That is correct—but, fellow teachers, it *takes time* to do real teaching; book teaching or machine teaching can be done faster and it shows better. (2) It will "be a bother." Right again. Teaching is a bother, anyhow, but that is what you are paid for. (3) It is not "necessary." There is where you are wrong, because it educates them into a knowledge of what a meter, etc., really is.

[I will only add that by addressing Melville Dewey, 24 Hawley street, Boston, you can get accurate apparatus.]

For the SCHOOL JOURNAL.

EVENING SCHOOL NO. 13.

Out of the dark night we emerged into the light and order and industry, of a well-regulated senior school. No children here, lisping the rudiments of knowledge; but toil-worn men, Germans, painfully and laboriously studying over the intricacies of the English language. "You will observe," said the principal, as he conducted us from room to room, "that we have no sinecures here. The students, many of whom know not a word of English at the beginning of the term, come not to fritter away their time, but to learn. Our teachers go home tired when the evening's work is done." "How do you classify the men when they apply for admission?" "We separate them into classes which can read and classes which know nothing of English reading." "Is disciplining necessary?" "No, these men come to study; nor do we think it advisable to treat them like children; but a word or a glance from the teacher is enough to check any disturbance. We have four hundred Germans present to-night."

The German classes are taught to write from copy and dictation, to spell, and to read and converse in English. Each class has its course of study which it pursues uninterruptedly as a class. English, spoken slowly and distinctly, is the medium through which the teacher conveys his wishes to the class.

WRITING.

The men write about one-half page in the copy-books, following the copy at the head of the page, and under this they write their names in full, and the date. Then the teacher dictates a sentence involving the use of the capital which has appeared in the copy. This sentence the men write unaided. Perhaps two or three sentences are dictated in like manner. Let us illustrate:

When the class is ready for its dictation exercise the teacher says clearly and distinctly, "A sentence!" He then asks the question, "What did I say?" Some member of the class gives the German equivalent; thereupon the teacher dictates the sentence, not forgetting to have the capital letter of the copy appear in the sentence. Supposing the capital to be M, the sentence may be, "Her brother is in Maine, or, I am going to Mexico." When the class have finished, the teacher goes the rounds and examines the work done with an eye to the kind of error, and also to those sentences which are absolutely perfect; and thereafter the dictated sentences are written correctly upon the board, and re-copied by those who failed to get them right the first time. As all German nouns begin with a capital letter the students are inclined to begin the English nouns in the same way.

READING.

Some easy intermediate reader is used. A paragraph is first read as a whole by the instructor; he then goes over the paragraph again, taking up sen-

tence after sentence, and calling upon members of the class to translate. Then the class read individually.

CONVERSATIONAL EXERCISES.

At the beginning of the term the students are given a small vocabulary of words in common use. Articles of furniture and the names of the various objects in the school-room, as chair, table, desk, book, pen, window-pole; articles of apparel, as coat, vest, shoe, hat. This vocabulary is increased by a few words every night, and serves as the medium of communication between instructor and pupil, no German being allowed. All school-room orders are also worded in English, as "open the door," "shut the window," "pass copy-books," "close books," "write," "stop writing." By this method the pupil must of necessity soon acquire a knowledge of these oft-repeated words.

THE TEACHER'S ART OF PUTTING THINGS.

The teacher has the matter of next Sabbath's lesson in his mind. How shall he so state it, question his class, illustrate and apply the truths, that the lesson shall have the greatest effect? *The first quality of style is clearness.* We should endeavor so to speak that the class cannot help understanding us. The example of our Lord Himself, whom the common people heard gladly, and of Paul, who used great plainness of speech and who commands us to give milk to babes, teaches us above all else, in our style to aim at clearness. Paul says, "I had rather speak five words with my understanding, than ten thousand words in an unknown tongue."

The second quality of style is force, i. e., energy, liveliness and strength.

The third quality of style is beauty.

To acquire clearness, form in your mind clear ideas. Whenever you think clearly and your heart is in it, you will teach clearly. Use plain words and good illustrations. Study the style of the Bible, especially the style of Jesus; from Christ learn to state truth concretely—not abstractly.

Sometimes use hard words to make your scholars think. Afterward explain them, and pray for great plainness of speech.

To acquire force, so turn over the truth in your mind that, as you muse, the fire will burn. Out of the fullness of the heart the mouth speaketh. Seek the aid of God's Spirit to demonstrate the truth with power to you and to the class, and deeply imbue yourself with the energy of the Bible style.

To acquire beauty of style, read prayerfully the most beautiful passages of the Bible; cultivate love for your scholars and let it form your style; yet, never sacrifice clearness or force to beauty.—*Westminster Teacher.*

OLD RECORDS.—While in the neighborhood of Bagdad, Mr. Rassam heard from the Arabs of some ruins, on the banks of a half-dry canal, called by the Arabs, Yusuffich, where plenty of "written stones were to be found." The mounds to which his attention was directed were called Deyr, and were situated on the north bank of the canal, about 30 miles southwest of Bagdad. While working at Deyr, Mr. Rassam paid a visit to the mounds called by the Arabs Tell Abu Hubba and his trenches soon rewarded him. The mounds of Abu Hubba are very extensive, covering an area over two miles in circumference, and the position of the walls and citadel is clearly marked by mounds and embankments of debris.

AN EPISCOPALIAN HORSE.—The Reverend Dr. Broadus, an old Baptist parson famous in Virginia, once visited a plantation where the darkey who met him at the gate asked him which barn he would have his horse put in.

"Have you two barns?" asked the doctor.

"Yes, sah," replied the darkey; "dar's de ole barn, and Mas'r Wales has jus' built a new one."

"Where do you usually put the horses of clergymen who come to see your master?"

"Well, sah, if dey's Methodist's or Baptist's, we gen'ally put 'em in de ole barn, but if dey's 'Piscopal we puts 'em in de new one."

"Well, Bob, you can put my horse in the new barn; I'm a Baptist, but my horse is an Episcopalian."

EDUCATIONAL NOTES

NEW YORK CITY.

The Board of Education met Nov. 2.

A report relative to truancy was made by the City Supt.

1,851 visits had been made.

242 truants had been placed in school.

38 non attendants.

On motion of Mr. Wood the report of the Committee on the Course of Study, relative to teaching of two or more grades in one class, was laid over till next meeting. Mr. West moved that the report of the Committee on by-law, to whom was referred the communication from Inspector Thomson, relative to the employment of pupils in other than school duties, be laid over. Mr. Donnelly thought it too ridiculous to punish by fine a teacher who happens to send out a pupil on some slight errand, such as is alleged to have been the case in the charge of Inspector Thomson. There was rebuke or condemnation for such an offence, if offence it can be called. Mr. Crawford said that the report as presented was not in proper form. A school officer, not being a salaried employe of the Board, could not be fined. Besides, the By-laws was unnecessary. The time of the principals was already taken up, and greatly to the detriment of the classes under their charge, by the numerous reports required of them by this Board and now it is proposed to add another burden by requiring them to make a record of such errands at the end of each month. He thought the by-law in the Manual sufficient and even that unnecessary. The teachers should be credited with at least a little discretion and judgment. Mr. West thought there had been no real investigation. It was with the greatest difficulty that the Inspector could be made to specify the school where the dish was washed or to name the teacher guilty of the offence. Besides, the accused had had no opportunity of being heard. If this resolution were passed no Principal or teacher could send a pupil to the yard for even a glass of water or in case of emergency send out for assistance. He moved that the whole matter be laid on the table.—Carried.

ELSEWHERE.

CINCINNATI.—Mr. E. Cort Williams, one of the "Board," thinks the parents should visit the schools; he thinks the teachers should have presents made to them. The *Commercial* says that ninety per cent would not know whether the schools were well taught or not. That parents do not visit the schools is not because of indifference, as is apparent if the schools are assailed.

The Metropolitan Museum of Art announce the opening of their Fourth Exhibition on October 31st. Every effort has been made to secure the co-operation of the owners of our principal private collections of sculpture and painting, and many most valuable and celebrated loans have been received. It is expected that this exhibition will far surpass any preceding ones and rival the memorable "Loan Collection" of 1876. The exhibition remains open till April.

The judges of the prize competition in wall-paper designs, originated by Messrs. Ward, Fuller & Co., made their awards upon the afternoon of the 18th. Mrs. T. M. Wheeler received the first prize, of \$1,000; Miss Ida Clark the second prize, of \$500; the third prize, of \$300, was carried off by Miss Caroline Townsend; and the fourth, of \$200, fell to Miss Dora Wheeler. The special prize of \$200 for a decorated ceiling was not awarded. Miss Townsend is the same lady who received the first prize offered by the Decorative Art Society for a portiere.

MASS.—Amherst College has inaugurated the new system of government. President Seelye, with the consent of the faculty, has invited the students to choose one representative from the freshman class, two from the sophomore, three from the junior, and four from the senior, who are to compose a representative assembly, to be presided over by a member of the faculty, which shall take a share in the administration of the affairs of the college. This body is in no way to supersede the authority of the faculty, but it is proposed that certain matters of discipline shall be delegated to it in the belief that the students are to some considerable extent fitted for self-government. The undergraduates at Amherst are considerable older in the average than in most colleges, and this fact may perhaps tend to make the experiment successful. It is not quite certain, however, that the plan will have a chance to be tried at all, for one class has voted against it and a late number of the *Amherst Student* predicts that the whole thing will fall through.

LETTERS.

I send you greeting from the Indian Territory, as a co-laborer in the high, honorable work of education. I see no others write from this Territory. I love to think that I belong to the honorable band of teachers, and while I am reading the *INSTITUTE* I feel I am not alone, but one of a vast army scattered all over our broad land! How many of my brother and sister-teachers know that we Cherokees have a good common-school system regulated by established law?—that we have a permanent school fund, sustaining now 100 primary schools, and two high schools, one male and one female, besides an orphan fund which has built a large, well-appointed brick house, where from 150 to 250 orphans are constantly supported and taught? It is hard to believe that.

Please notice that all are not savages who have the name of Indian. I call your attention to an official notice to our teachers to prepare themselves for successful examination by reading and studying a standard work on the "Art of Teaching."

A CHEROKEE (NATIVE) TEACHER.

You say the schools are for the children; so they should be, but who believes it, that is in New York? Does Pres. Walker, or Supt. Jasper, or any other sane man who knows how things are worked? At the present time we are working a lot of little machines, and striving to produce the best "results," not out of any good or ill will to the machines but because we have pockets which we like to fill and characters to maintain. If the machines produce the maximum results, that is, if each and every machine produces a certain specified quantity, we obtain a certain "mark." Every and each machine must do exactly the same thing, but that is exactly what the God of nature did not mean when he created them. What they need is good, sensible culture in the place of the vicious cramming they now get.

(Just so. Settle) what is good teaching and let the amount of knowledge be a very secondary thing. That is sound sense.—EDITOR.)

As a practical teacher I must protest against the mode of measuring the progress of the pupils in the New York schools. Many children are apt and quick in learning the art of reading, while they are slow in regard to arithmetic. Others have a faculty for numbers, but are the reverse of rapid in regard to reading. The course of study supposes that there is an equal growth and ability in regard to both. We go on year after year and find our labor thrown away. The school, instead of being a help, is a hindrance to him.

A TEACHER.

"If there were to be any difference between a girl's education and a boy's, I should say that of the two the girl should be earlier led, as her intellect ripens faster, into deep and serious subjects; and that her range of literature should be, not more, but less frivolous, calculated to add the qualities of patience and seriousness to her natural poignancy of thought and quickness of wit, and also keep her in a lofty and pure element of thought. I enter not now into any question of choice of books; only be sure that her books are not heaped up in her lap as they fall out of the package of the circulating library, wet with the last and latest spray of the fountain of folly."

THE SUN'S HEAT.—Were a rod of ice forty-five miles in diameter darted toward the sun with the velocity of light, its advancing point would be melted off as fast as it approached, provided all the solar rays could be concentrated upon it. Or, were it possible to span the inconceivable distance which separates the earth from the sun by a solid column of ice two and one quarter miles in diameter, and the sun then concentrate all his power upon it, it would dissolve and melt, not in an hour or a minute, but in a single second. One swing of the pendulum and it would be water, several more and it would dissipate in vapor. An easy calculation shows that to produce this amount of heat by combustion would require the hourly burning of a layer of anthracite coal about sixteen feet thick over the entire surface of the sun. This is equivalent to a continuous evolution of more than seven thousand horse-power on every square foot of the sun's area.—HERSCHEL.

"When I was a young man," said Billings, "I was always in a hurry to hold the big end of the log and do all the lifting; now I am older, I seize hold of the small end and do all the grunting."

EDUCATIONAL MISCELLANY.

BORN TO TEACH.

[The following account of a genuine teacher will awaken a desire to follow his methods.]

Mr. Beck, of Lititz, Pa., was a most remarkable man as a teacher. He learned the trade of a shoemaker, and made his home in his brother's house, and in one of the rooms prosecuted his avocation. The boys soon found that he had a fund of knowledge and could delight them by communicating it, and they frequented his shop and gathered round him as he took his evening stroll through the village. After he had worked at his trade for ten years, and reached the age of twenty-four, he was, to his surprise, waited upon by several villagers and desired to take charge of their children, as the schoolmaster had become old and wished to relinquish his charge, and the children wished to have Mr. B. for a teacher. He absolutely refused, thinking himself unfit for the position. But they returned with the name of every man and woman in the village upon a paper, soliciting him to undertake the task. He could not decline, and undertook for three months, supposing that his employers would be desirous of having other services by the close of that time. The old blacksmith's shop was fitted up with benches, and he was installed in his post. Swiftly passed the time and another quarter was entered upon, and before its close the parents were so much pleased, and he had gained so much confidence, that he undertook for the rest of the year; by the end of which he had acquired such an interest in the children that "nothing could have separated" him from them, and he made up his mind to drop all thought of returning to his trade, and devote himself to teaching, or, to use his own words in a letter not written for the public eye, but in answer to inquiries: "I became so much attached to the children that nothing could have induced me to leave them, and I determined to devote my life and all my energies to the welfare of youth, and at once commenced improving myself. I labored very hard to obtain more knowledge, as well as for the welfare of my pupils, and every cent I could realize was invested for the benefit of the school, and my patrons frequently spoke to me about it, saying they could not compensate me for what I was doing, but I cared not, provided I could improve myself and the scholars."

The time when these things transpired was in 1815, and for five years his time was spent with the children of that pleasant village. But in 1820 a new life dawned upon him. One pleasant Saturday afternoon, as he came out in his every-day garments from a shop where he had been painting a sign in order to turn a penny into his scanty coffers, a finely-clad gentleman addressed him, inquiring for the village schoolmaster. He answered that he was the man. The gentleman replied that he was from Baltimore, and wished to put his boy to school with Mr. Beck, and as the schoolmaster refused, giving one reason and another, they were removed by the gentleman, who would not be put off. He was taken to the old blacksmith's shop and shown the accommodations, and though persistently refused, left with the assertion that he should bring his boy, and within a week brought and left him. "I consented to receive him at last, cherishing the hope that as this was the first so it would be the last I should receive from abroad, for I yet distrusted my ability to teach. In this I was disappointed, for shortly after five more were brought from Baltimore, owing to the recommendation of the father of the first. No previous application had been made, and the parents insisted on their remaining. Several others were added from time to time, and in 1822 the old shop was removed and a new house built on the spot where it stood. Having now a fine house and more scholars, I became still more enthusiastic."

Eighteen hundred and ninety-six scholars from abroad have enjoyed his instructions since 1820, and he remarks:

"I pride myself on being able to say, that an advertisement of mine has never been inserted in

any paper in the United States, I have never employed a traveling agent, nor have I asked a parent to send a son to me; my pupils have been my advertisements and my solicitors, and I really do believe that of the seventy-four who are now here, there is not one who did not come through the influence of some former pupil."

The chief reasons for this success seem to be, 1st. A sincere interest in the welfare of every student placed under his charge. This secures the confidence of his pupils and makes them love him. 2d. He has the greatest enthusiasm in every thing of a scientific character—always on hand to learn anything new, and equally desirous of communicating. 3d. But the most important thing of all is, he desires and intends that his pupils shall *really know* what is brought before them, and appreciates the importance of pleasing in order to instruct. No expense is spared for apparatus, drawings and every kind of illustration, especially such as will entertain as well as sow the seeds of science. For example, three magic lanterns and six hundred dollars' worth of slides are made sources of instruction and delight during his lectures on history, geography, etc.

Thus does he, and thus many others, pass a happy life in active usefulness, and generations yet unborn shall enjoy and bless the results of such labors; and when the close of life shall come, it will be looked back upon with satisfaction, and the profession of a true teacher will be considered neither as laborious, thankless, or bootless.

IN THE KINDERGARTEN.

A few years ago one of our enterprising New York papers sent a reporter to visit Mrs. Kraus' Kindergarten. From that report the public got a better idea than it had ever had before of the interior life of a true Kindergarten.

THE STICK EXERCISE.

The reporter says: Their baby fingers fell to work making with those what they called "forms of beauty." Right angles, acute angles, and obtuse angles were formed and grew into equilateral, isosceles, right, obtuse scalene, triangles, or were thrown into tetragons, pentagons, hexagons, and octagons, or branching into bolder and more intricate figures, formed tetrahedrons, hexahedrons, octahedrons, dodecahedrons, and icosahedrons (but these names are not given to the children): some of the little ones, combining to follow out the hints given by the forms and guided by the squares of the table, made figures of boats and ships, trees, towers, houses and bridges, with their straws.

Mrs. Kraus says: "I begin with the simple lesson of two lines, the base and perpendicular, showing them that they must form an angle. I then proceed to show them all the capacities and possibilities of these lines and the figures that may be formed by them. Then I give them more complicated geometric forms, and then tell them to make whatever they please. You see the result. These children do not call these figures by the names given them by mathematicians, but in fact they know all the forms and uses of those forms. It strengthens their mental and stimulates their inventive powers, so that they become designers without being aware of it."

The most surprising thing was the perfect order preserved by these children, yet the entire freedom from constraint or stiffness. They conversed in low and gentle tones, or played with each other, or bestowed little caresses, or laughed or sang just as they chose. They sang at their work, humming astonishing if it were otherwise; and the more judicious should be the answers which they receive.

You are acquainted with my opinion, that, as soon as the infant has reached a certain age, every object that surrounds him might be made instrumental to the excitement of thought. You are aware of the principles which I have laid down, and the exercises which I have pointed out to mothers. You have frequently expressed your astonishment at the success with which mothers who followed my plan, or who had formed a similar one of their own, were constantly employed in awakening, in

very young children, the dormant faculties of thought. The keenness with which they followed what was laid before them, the regularity with which they went through their little exercises, has given you the conviction that upon a similar plan it would be easy not only for a mother to educate a few, but for a teacher also to manage a large number of very young children. But I have not now to do with the means which may be best appropriated to the purpose of developing thought. I merely want to point to the fact, that thought will spring up in the infant mind; and that, though neglected, or even misdirected, yet a restless intellectual activity must, sooner or later, enable the child in more than one respect, to grow *intellectually independent* of others.

If education is understood to be the work, not of a certain course of exercises resumed at stated times, but of a continual and benevolent superintendence; if the importance of development is acknowledged not only in favor of the memory and the intellect, and a few abilities which lead to indispensable attainments, but in favor of all the faculties, whatever may be their names, or nature or energy, which Providence has implanted; its province thus enlarged, will yet be with less difficulty surveyed from one point of view, and will have more of a systematic and truly philosophical character than an incoherent mass of exercises, arranged without unity of principle, and gone through without interest, which frequently but not appropriately, receives the name of education.

We must bear in mind that the ultimate end of education is not a perfection in the accomplishments of the school, but fitness for life; not the acquirement of habits of blind obedience and of prescribed diligence, but a preparation for independent action. We must bear in mind that whatever class of society a pupil may belong to, whatever calling he may be intended for, there are certain faculties in human nature common to all, which constitute the stock of the fundamental energies of man. We have no right to withhold from any one the opportunities of developing all their faculties. It may be judicious to treat some of them with marked attention, and to give up the idea of bringing others to high perfection. The diversity of talent and inclination, of plans and pursuits, is a sufficient proof any song that struck their fancy, as many joining in as pleased. Not a listless, or wearied or impatient, or disconcerted, or unamiable expression flitted across their faces during the three hours that passed. I asked Mrs. Kraus how she managed to keep them so interested and happy. She replied:

"It requires long and patient study and a natural adaptation of character to make a good kindergarten. Kindergarten is psychology and philosophy applied to infant training. I studied three years with Madame Froebel, the widow of the great inventor of the system. Froebel was a profound philosopher, and like all philosophers and reformers and great teachers, he was persecuted. He was not appreciated in his day, nor is he fully yet. At one time kindergartens were proscribed in Germany, as it was asserted they were teaching children to be atheists. Now a better spirit prevails, and they are re-introducing them into the national schools. There ought to be a kindergarten attached to every public school in this city. The teachers should be well educated and accomplished young ladies of society, the very class that don't know what to do with themselves or their time. It would give them three hours delightful occupation five days in the week while preparing themselves to be able to teach their own children when they become mothers. A year's training and six month's practice under a good kindergarten is all that would be necessary, but that is absolutely necessary, in my opinion, to make a successful one."

"One reason of the prejudice that has arisen in America against kindergartens is that there are many infant schools and play schools called by that name that are not conducted on Froebel's system. When the children from those schools enter the primary classes of the public schools the teachers complain that they are actually duller than the others."

The reason is clear to my mind. These children have had too much teaching of things that did not stimulate them to invention or investigation. They have been habituated to reliance on the mind of their so-called kindergartner instead of thinking for themselves. The true kindergartner gives no more assistance than is necessary to stimulate the child to mental effort of his own."

"Is it not necessary to punish the child sometimes?" I asked.

"If by punishing you mean striking or whipping them, no. The only punishment I ever inflict is to deprive a child of the privilege of working. Perseverance in that method of punishment will subdue the most obstinate child I ever saw, and I have taught many years, first in Germany, then in England, and afterward in America."

Next they formed in a square around the piano; one little boy mounted a chair and was given a stick for a director's baton. Then they all sang, beating time:

Look at little Harry,
Who shows us the game;
Look at little Harry,
We'll now do the same.

This little verse was also used in the last gymnastic play of the day, first one then another child taking the center of the ring, and choosing an exercise which was followed by the rest. In these gymnastics every conceivable natural and artificial object was imitated and illustrated with a song or story, or both. Windmills and water wheels, farmer's works of all kinds, mechanical work, such as barrel making, and grinding corn in the mill, came into the play. The nurses began to drop in; the hands of the clock pointed to 12:30 P. M.; Mrs. Kraus clapped her hands and proposed the good-by song, in which all joined:

Our play time now is o'er,
And homeward we must go;
Good-by, good-by,
Good children let us be, etc.

One by one the little ones dropped out of the ring and bidding their teacher good morning, with a courtesy or bow, left the room.

PHYSICAL EDUCATION.

In order to forestall the chief danger of in-door life, make your children love-sick after fresh air; make them associate the idea of fusty rooms with prison-life, punishment, and sickness. Open a window whenever they complain of headache or nausea. Promise them a woodland excursion as a reward of exceptionally good behavior. Save your best sweetmeats for out-door festivals. By the witchery of associated ideas a boy can come to regard the lonely shade-tree as a primary requisite to the enjoyment of a good story-book. Children who have been brought up in hygienic homes not rarely "feel as if they were going to be choked" in unventilated rooms, and I would take good care not to cure them of such salutary idiosyncrasies.

Every observant teacher must have noticed the innate hardness of young boys, their unaffected indifference to wind and weather. They seem to take a delight in braving the extremes of temperatures, and by simply indulging this *penchant* of theirs, children can be made weather-proof to an almost unlimited degree; and in nothing else can they be more safely trusted to the guidance of their protective instincts. Don't be afraid that an active boy will hurt himself by voluntary exposure, unless his chances for out-door play are so rare as to tempt him to abuse the first opportunity. Weather-proof people are almost sickness-proof; a merry hunting-excursion to the snow-clad highland will rarely fail to counteract the consequences of repeated surfeits; even girls who have learned to brave the winter storms of our Northwestern prairies will afterwards laugh at "draughts" and "raw March winds." Winter is the season of lung affections, the larger part of them induced by long confinement in a vitiated atmosphere; the part caused by light winter clothes is smaller than most people imagine. I have weathered a good many winters without fur caps and woolen shawls, and I ascribe my immunity to the circumstance that my guardian made

it a rule never to force us to wear such things. The Moslems rarely eat before washing their hands, and a rather unscrupulous frontier Turk assured me that in his case the practice had nothing to do with superstition; it had become a physiological habit, whose omission he had found, would produce a fit of very realistic nausea. In the same way more comprehensive ablutions may become a physiological necessity: there are people who owe their sound sleep and other sound things to their inability to go to bed without a sponge bath. The habit can be formed in one summer.

Instead of lecturing a lad or taking away his pocket knife for cutting his finger, engage a carpenter to teach him the proper use of edge tools. Let him have a little workshop of his own, with a lot of scrap-tin, boards, nails, and a five-dollar toolbox. Ten to one that those five dollars will save ten cents a week for dime novels, and by-and-bye ten dollars a month for beer and tobacco. If your son should manifest symptoms of the collecting mania, try to direct it to objects of natural history—herbs, beetles, or butterflies. It may lead to deeper studies, and the love of nature in general. A passion for the study of natural history has often turned the scales in a choice between a farm and a dry-goods prison.

If I should name the greatest danger of childhood I would unhesitatingly say, medicine. A drastic drug as a remedial agent is Beelzebub in the role of an exorcist.

"A catarrh is a beginning of a lung disease." It would be the end of it if we did not aggravate it with nostrums and fusty sick-rooms.

A glutton will find it easier to reduce the number of his meals than the number of his dishes.

A banquet without fruit is a garden without flowers.

The best stuff for summer wear: one stratum of the lightest mosquito-proof linen.

The "breaking-up" of a pulmonary disease could often be accomplished by breaking the bed-room windows.

Death, formerly the end of health, is nowadays the end of a disease.

Dying a natural death is one of the lost arts.

A patent-medicine man is generally the patentee of a device for selling whiskey under a new name.

If it were not for calorific food and superfluous garments, midsummer would be the most pleasant part of the year.—*Popular Science Monthly*.

NAMES OF COUNTRIES.

The following countries, it is said, were originally named by the Phœnicians, the greatest commercial people in the world. The names in the Phœnician language, signified something characteristic of the places which they designate.

Europe signifies a country of white complexion; so named because the inhabitants were of a lighter complexion than those of Asia and Africa.

Asia signifies between or in the middle, from the fact that the geographers placed it between Europe and Africa.

Africa signifies the land of corn, or ears. It was celebrated for its abundance of corn, and all sorts of grain.

Siberia signifies thirsty or dry—very characteristic.

Spain, a country of rabbits or conies. It was once so infested with these animals that it sued Augustus for an army to destroy them.

Italy, a country of pitch, from its yielding great quantities of black pitch.

Calabria, also, for the same reason.

Gaul, modern France, signifies yellow-haired, as yellow hair characterized its inhabitants.

The English of Caledonia is a high hill. This was a rugged, mountainous province in Scotland.

Hibernia is utmost or last habitation; for beyond this westward, the Phœnicians never extended their voyages.

Britain, the country of tin, great quantities being found on it and adjacent islands. The Greeks called it Albion, which signifies in the Phœnician tongue white or high mountains, from the white-

ness of its shores, or the high rocks on the western coast.

Corsica signifies a woody place.

Sardinia signifies the footsteps of men, which it resembles.

Syracuse, bad savor, so called from the unwholesome marsh on which it stood.

Rhodes, serpents or dragons, which it produced in abundance.

Sicily, the country of grapes.

Scylla, the whirlpool of destruction.

Ætna signifies a furnace, or dark, smoky.

SCHOOL TEACHERS.

School Superintendents and School Directors, all over the State are now engaged in examining and employing teachers for the term to include the coming winter. To take charge of the schools of the State requires thousands of teachers, and the selection of them is an important duty. There are many influences at work, no doubt, in these selections, other than a disinterested regard for the prosperity of the schools. It is but human nature that such is the case. It is quite natural that relatives' and friends' applicants should use their influence in behalf of their favorites. But there is no one that has so much at stake in the selection of teachers as parents and the children whom the teachers are expected to instruct. Not every one can be a good teacher any more than every one can be a poet or anything else where special gifts come into play. Some may be highly educated themselves, and yet have no talent for imparting it, while others of far less culture will advance scholars much faster. This shows that it is not always the certificate that should be wholly looked to. This gift in imparting education is established only by experience, and where a locality is fortunate enough to secure such a person, he or she should not be parted with if it can be avoided.

One of the essential things in properly training the mind of the young, is to have them *thoroughly* understand what they go over. We fear that too much of our "school learning" is of a most superficial character, and it requires great courage on the part of the teacher to avoid this. Among many children there is a reluctance to study, and yet their parents expect them to be *promoted* as fast as their classmates, and if they are not there is very likely some parental buzzing to be coming around the ear of the teacher. It is a great injustice to a child to push him forward faster than he is fitted to go, merely to give him the name of "studying the higher branches." Our country to-day is filled with graduates of high schools, who have been *examined* and *passed* in the classics who really know no more of the classics than a poll parrot does of the "exact sciences;" indeed, many of them are shamefully ignorant of those primary branches of a common school education: reading, writing and arithmetic. We might truthfully say the same of many "college" graduates. The mournful truth is, that parents prefer to have their children superficial in many things, which are, therefore, useless to them, to being master of a few things which would give them a sound foundation to build upon. They are not going to have their Johnny in a lower class than their neighbor's Bill, and, consequently, he must go through books which he does not and never will know anything about. If parents were wise they would require their children to master what they pass over, if it be nothing more than the very lowest branches; and when this idea becomes popular, and shall have been adopted, young men and young ladies will go out into the world better equipped for the battle of life.—*Lebanon Courier*.

This is the way a Vassar girl tells a joke. "Oh, girls! I heard just the best thing to-day. It was too funny. I can't remember how it came about, but one of the girls said to Professor Mitchell—oh, dear, I can't remember just what she said; but Professor Mitchell's answer was just too funny for any use; I forgot just exactly what he said, but it was too good for anything!"

SCIENCE IN SCHOOLS.

At the British Association, Sir John Lubbock said: "In education some progress has been made towards a more rational system. When I was at a public school neither science, modern languages, nor arithmetic formed any part of the school system. This is now happily changed. Much, however, still remains to be done. Too little time is still devoted to French and German, and it is much to be regretted that even in some of our best schools they are taught as dead languages. Lastly, with few exceptions, only one or two hours on an average are devoted to science. We have, I am sure, none of us any desire to exclude, or discourage literature. What we ask is that, say, six hours a week each should be devoted to mathematics, modern languages and science—an arrangement which would still leave twenty hours for Latin and Greek. I admit the difficulties which schoolmasters have to contend with, nevertheless, when we consider what science has done and is doing for us, we cannot but consider that our present system of education is, in the words of the Duke of Devonshire's Commission, little less than a national misfortune."

A committee consisting of the most eminent persons reported on the manner in which Rudimentary science should be taught. They say: Object lessons are attempted in a large number of infant schools, and in some instances are very effective in developing the perceptive powers and intelligence of the children; but in other cases they are too formal, and left too much to the junior teachers. In boys' and girls' schools they frequently appear upon the time-table, especially where, as in the schools of the London Board, they are looked upon as a necessary part of the instruction; but they are generally given in an unsystematic and often in an unsatisfactory manner.

In Birmingham, 1,200 scholars are receiving scientific instruction in the schools of the Board, and it is stated that the teachers uniformly find that "it added interest to the work of the school, that the children were eager to be present, and that the lessons were enjoyed, and were in fact giving new life to the schools." The Board have found the results so satisfactory that they are now furnishing their newest schools with a laboratory and lecture-room.

As to specific science subjects. That a knowledge of the facts of nature is an essential part of the education of every child, and that it should be given continuously during the whole of school life, from the baby class to the highest standard. Of course, in early years, this teaching will be very rudimentary; but by developing the child's powers of perception and comparison it will prepare it for a gradual extension of such knowledge.

THE AMERICAN INSTITUTE.—The fair of the American Institute is an annual joy. The impression is first that of a bazaar, a dozen Fourteenth streets and Sixth avenues in one. There is a garden with fountain and plants and a music pavilion where a band is playing. The famous Arbuckle is here, and there is a factory full of boom and clatter and steam-hissing and oil-smells, and the gleam of machinery at work. Mr. F. B. Thurber gives every one a capital cup of coffee.

The Art Gallery up stairs is composed of quite an interesting collection of photographs and chromos. President Garfield is served up in every style and on the whole, this semi-centennial of the Institutes is one that shows well the progress of the city. It is a capital place to take the young folks. The public school boys and girls will of course go on Saturday.

The salutatorian at Yale this year was a Dutchman, the Valedictorian a Hebrew, and the prize declaimer a Chinaman. And the Americans? Well, when it comes to base ball and boat racing the Americans have the educational bulge on the foreigners. The Dutchman, Hebrew and Chinaman will mourn over "lost opportunities" before they are a year older—when they see that the newspapers devote more space to a boat race than to all the salutatories, valedictories and declamations ever written.

FOR THE SCHOLARS.

GATHERING HAZELNUTS.

By MRS. A. ELMORE.

"A charming day for getting nuts," said Cousin Allie, looking out over her flower garden away into the Indian summer haze of the far west. It was Saturday, and her scholars were not needing her care in the little brick school-house on the round, barren, center knoll of that high prairie.

"I'm quite agreed, my little girl," exclaimed her broad-shouldered, grey-haired father, and in half an hour we were off; a very small party but a happy one—my jovial uncle, with cousin, myself, and Jack and Jenny the farm mules.

The wagon was unique even for a western farm wagon, the stiff, strong body having been removed and a loose jointed affair of home manufacture substituted. No cushioned carriage could have been easier to ride in than that old "rattle-box," especially when drawn by those queer mates Jack and Jenny, over the grass grown prairie roadway. Jack was as full of fun as any school-boy; while Jenny was sullen and always in an apparent state of indignation at Jack for his wiggling, kicking, and generally don't-care way of hustling along.

It was indeed "a charming day"—the air so pure, the breeze so light; the flowers nodding in the grass, so brilliant in their scarlet and yellow robes, the pale, fragrant summer flowers had ended their labors for the year and gone to sleep in their grassy beds, the corn fields were a tangled mass of yellow stalks, dried blades, immense ears, and sun-gilded pumpkins; wide stretches of "hill-side" and "bottom" had been shorn of the luxuriant grass, and countless stacks of hay stored for winter use. Away we went, our empty baskets keeping up a rat-tat-tat on the floor of the wagon, Jack picking at every wayside shrub which he fancied he could reach; we three laughing merrily and exchanging our pleasant thoughts.

The few miles of the "hazel-rough" were soon passed, and we found acres of ground thickly studded with bushes bearing the singular clusters of little brown nuts. Jack was tied to a scrub oak; Jenny would have stood still anywhere we wished, but Jack was not reliable in that respect, except that we were sure he would plan some mischief as soon as the lines were free—being tied, we thought he could do nothing worse than nip Jenny's ears, and pull her bristling mane, keeping sideways out of reach of her quick little heels, knowing that he was safe while the wagon tongue extended a friendly bar between them.

Little baskets had been emptied into larger ones in the wagon several times. Uncle had set down to rest on the sward. Allie's blue sunbonnet was visible above the brush a little ways from the road, my pink one farther up the hillside,—and all as still as though laughter, song, wind, or rain had never been heard there. Suddenly a crash of wood, a jingling of chains, the muffled rumble of wheels, a badly sunburned wideawake hat was lifted up from the ground, about six feet, as the owner shouted "Whoa, Jack, whoa." The two sunbonnets were rapidly carried to the roadway, and two pair of eyes looked in dismayed silence after the fast mule train homeward bound.

Jack had "managed" (he was a wonderful manager) to break the limb of the tree, and that was flopping about his feet, bouncing against his side, and dabbing him in the face as he ran on; only a swift horse could have overtaken him until he chose to stop, and there was nothing to do but trudge on home behind the run-aways. Their pace slackened at last, and Jack would look back once in a while, shake his head and wag his tail as though it was a fine joke. If we hurried he hurried; if we halted he halted; but he kept a safe distance between us—until it occurred to him to munch some shrubs by the way. Uncle silently climbed into the wagon over the end board, and had the controlling power in his own hands before Jack realized that he was captured.

Our baskets were upset, of course, and our nice lunch mixed up with the fringed cups where the nuts lay hidden but our vexation at Jack was soon forgotten in the pleasure of our homeward ride.

The day was embalmed by memory: the autumn glories of land and sky; the low sweet song of the brooks, so soon to be lulled to sleep by the frost; the baying of the hound-dogs as we passed the few farm-houses; the voices of men busy with the corn harvest; the rusty coat and gaunt outlines of a wolf, sneaking along the ridge to rob some poultry yard—cowed by the presence of the conqueror of the prairies and no longer a terror to the traveler; the fading day; the mellow tints of sunset; the cosy home, bounteous supper, and

peaceful evening, when we sat in the twilight thinking instead of talking,—our quiet broken in upon, occasionally by a mournful "cuckoo" from the shadowy depths of a tree on the lawn, where a pair of those quaint birds had built a home; the monotonous refrain to all our thinking offered by the contradictory "Katy-did" family; the falling asleep with dreams of endless slopes of hazel-rough, long stretches of "bottom," with wadding flumy brakes—all became part and parcel of "a joy forever."—*Scholar's Companion.*

HOW TO BE HANDSOME.

Every body wants to be handsome. And what is curious you may all be handsomer than you now are. How? how? I hear many say; tell me how. In the first place you must be healthy, so that the rules of health must all be observed. Keep clean—wash freely, and usually with cold water. The skin must be able to act freely. Its thousands of air holes must not be plugged up. Eat regularly and simply. The stomach can no more work the time, night and day, than a horse; it must have regular work and regular rest. Good teeth are essential to good looks, people are continually talking or laughing. Brush them with a soft brush, especially at night. Go to bed at night with the teeth clean. Of course, to have white teeth it is needful to let tobacco alone. Every woman knows that. And any powder or wash for the teeth should be very simple. Acids may whiten the teeth, but they take off the enamel or injure them. Look well to the ventilation of your rooms. No one can have a clear skin who breathes bad air. But, more than all, in order to look well, wake up the mind and the soul. When the mind is awake, the dull, sleepy look passes away from the eyes. Keep thinking pleasant, noble thoughts, and not read trashy novels, but books that have something good in them. Talk with people who know something; hear lectures and learn by them. This is one good of hearing preaching. A man who thinks and works, shows the result. If we listen, and heed, and understand, the mind and soul are waked up. If the spiritual nature is aroused so much the better. We have seen a plain face really glorified with the love of God and man which shone through it. And lastly do all the good you can. Come let us begin to grow handsomer.

SIGHTS IN NEW YORK CITY.

TRINITY CEMETERY.

By G. B. H.

This is a small, but beautiful Cemetery, owned by Trinity Church, and situated in the upper part of the city. It occupies the block and is surrounded by a fence the most massive and costly to be seen on the island. The Boulevard divides it into two nearly equal parts connected by a handsome suspension bridge. Within its sacred precincts most charming views of the Hudson River may be seen, and along its winding walks and terraced drives bloom the fairest flowers while from the branches of its old, primeval trees, wild-birds sing their sweetest songs. The river sleeps like a mirror at its feet. Some of the wealthiest and most distinguished citizens of New York are buried in this cemetery. The Woods, the Astors, the Ciccos, the Felixes, and many more, lie here in unostentatious, but magnificent sepulture. Probably the most famous shrine of all, is that of John J. Audubon, the ornithologist. His tomb is at the foot of the cemetery, near the beautiful river on whose historic banks he built his home. Born on the bayous of Louisiana, he early manifested a passion for birds. At the age of seventeen, we find him hard at work in a studio at Paris. Then he is a merchant, but tired of drudgery, against the entreaties of his friends, he plunges into the woods—becomes a tramp. We behold him, sleeping at the feet of trees—living on game, which he shot himself, floating for days and weeks, in a frail boat, down strange, silent rivers, wandering for months and months in interminable forests sketching the feathered tribes with the fidelity of an artist and the energy of an enthusiast, till after years of hardship and danger, he suddenly appears in the Capitals of Europe a half wild man, with that immortal portfolio under his arm, which Cuvier pronounced, "the most gigantic and the most magnificent monument that had ever been erected to nature." Could there be a more fitting resting-place for such a grand and romantic genius?—*Scholar's Companion.*

A YOUNG man in love is not necessarily a mathematician, but he is nearly always a sigh for her. If you can't cipher this out we sigh for you.

HORSFORD'S ACID PHOSPHATE affords nourishment to the Cerebral and Nervous systems.

BOOK DEPARTMENT.

NEW BOOKS.

Publishers will favor themselves and us by always giving prices of books.

INTRODUCTORY COURSE OF NATURAL PHILOSOPHY, for the use of high schools and academies, edited from Ganot's Popular Physics, by Wm. G. Peck, LL.D., revised (1881) by Levi S. Burbank, A.M., and James I. Hanson, A.M. New York: A. S. Barnes & Co.

In 1860 Prof. Peck prepared an American edition of Mr. Ganot's elementary work on Physics. This has had several years of great popularity; the publishers have lately thought it advisable to have this important book brought thoroughly up to the times, and engaged Prof. Burbank, late principal of Warren Academy, Woburn, Mass., for the purpose. The death of this accomplished educator took place before he had completed his work, and it was then taken in hand by Prof. Hanson, who was familiar with his plans and has ably and satisfactorily brought the work to completion.

The essential characteristics and general plan of the book have so far as possible been retained, but at the same time many parts have been entirely rewritten, much new matter added, a large number of new cuts introduced, and the whole treatise thoroughly revised and brought into harmony with the present advanced stage of scientific discovery.

Among the new features designed to aid in teaching the subject-matter, are the summaries of topics, which, it is thought, will be found very convenient in short reviews.

As many teachers prefer to prepare their own questions on the text, and many do not have time to spend in the solution of problems, it has been deemed expedient to insert both the review questions and problems at the end of the volume, to be used or not at the discretion of the instructor.

GOOD MORALS AND GENTLE MANNERS, for schools and families, by Alex. McGow. Cincinnati: Van Antwerp, Bragg & Co.

The author believes that children may be trained up in the way they should go; he believes that this training implies discipline, and that moral instruction should be given regularly, systematically and practically as instruction in the departments of science. That our schools should be places of true refinement and culture is a proposition all will admit, but they too often are not, and this results from the inattention of the teacher. The author has made a volume that will be of real help to all who desire to cultivate the moral feeling. The subjects of habits, duties, hatred, courage, veracity, temperance, obedience, and humanity are well discussed. Besides these, cleanliness, dress, conversation, behavior, etc., are treated of in a clear and pleasing manner. The teacher will derive many valuable hints from this book.

THE STEPS OF BOOK-KEEPING FOR TEACHERS AND LEARNERS. Single and Double Entry. By H. W. Ellsworth. New York: Taintor Bros., Merrill & Co.

This is an excellent treatise. The author is a most earnest teacher and has been successful in preparing works that have done good service in the schools. This volume goes over the

six steps: (1) Making the entries, (2) journalizing them, (3) posting them, (4) making the trial balance, (5) balancing the accounts, (6) making the balance sheet. He makes them plain by many illustrations. The volume is small and well planned for the school-room.

WOOD-BUILDING FOR THE USE OF CLASSES IN ETYMOLOGY. By S. L. Halde-man. Philadelphia: J. B. Lippincott & Co.

The able author of this little book has lately died. He was a live teacher; though a man of large learning, holding a professorship in the University of Penn., yet he attended the meetings of the Penn. State Teachers' Association. This may sound singular, but look around and find another, if you can. The book is a small one, but is filled with examples of the building up of words on a stem; examples *ped-al, ped-ate, bi-bed, centi-ped, ped-uncle, pedi-cel, petiole, pedestal, pedestrian*, etc. It will be found very serviceable to the teacher.

LIFE AND HER CHILDREN, Glimpses of animal life from the Ameba to the Insects, by Arabella B. Buckley. New York: D. Appleton & Co.

The author is a pleasing, instructive and vigorous writer. Her main object is to acquaint young people with the structure and habits of the lower forms of life. It has over 100 illustrations. The twelve chapters contain a great mass of most valuable information for one who desires to penetrate the secrets of animal life. Thus we have how sponges live, the lasso-throwers of the ponds and ocean, how star fish walk, etc. Very few are aware how full of life this world is, and the children of the schools should be taught, (not out of a text-book,) but by a loving teacher, the wonderful things that exist on the trees, in the earth and air.

A MANUAL OF FREE GYMNASTICS AND Dumbell Exercises, for the school-room and parlor, by H. Smart. Cincinnati: Van Antwerp, Bragg & Co.

This little volume contains much valuable and practical information concerning Gymnastics. The exercises are adapted to every-day use in the school-room or parlor. The tendency of free gymnastics is to develop the muscles, enlarge the chest, and invigorate the body. It is also an aid in the discipline of the school.

MAN'S ORIGIN AND DESTINY, sketched from the platform of the physical sciences, by J. P. Lesley. Boston: Geo. H. Ellis, 141 Franklin street.

The sixteen lectures in this volume were delivered before the Lowell Institute. An enumeration of the title of the lectures will show the broad and interesting ground covered by the author: 1. The Classification of the Sciences. 2. The genius of the physical sciences, ancient and modern. 3. The geological antiquity of man. 4. The dignity of mankind. 5. The unity of mankind. 6. The early social life of man. 7. Language as a test of race. 8. The growth of architecture. 9. The growth of the alphabet. 10. The physical destiny of the race. 11. The social destiny of the race.

THE DUTIES OF WOMEN, by Frances Power Cobbe. Boston: Geo. H. Ellis, 141 Franklin street.

This volume contains the lectures delivered by Mrs. Cobbe in London during the winter of 1880-81 and which

attracted much attention. It is full of the noblest sentiments and is properly termed "a honest book of noble living." The influence that women may exert is too enormous for computation; the influence they do exert is small, because they care but little. When a woman is so indifferent that she passes a steam-engine daily for ten years (as one intelligent woman confessed she did) without ever investigating the mode by which it developed and employed power, there is room for great effort. Mrs. Cobbe deserves the thanks of mankind if not of woman-kind for her book.

THE WHITTIER BIRTHDAY-BOOK, arranged by Elizabeth S. Owen. Boston: Houghton, Mifflin & Co.

This is another of those charming volumes, published by this firm, and entitles them to much praise. The days of the year are given in one page and on the other are appropriate verses selected from the noble American poet. One marked feature is the noting of the birthdays of many whom the world are apt to forget; Lucretia Mott, Owen Lovejoy, Anthony Benezet, and many such characters have a place. This is well. The book is of course handsomely printed.

SHAKESPEARE'S OTHELLO, by Henry N. Hudson. Boston: Ginn & Heath.

This is another of the "Annotated English Classics," published by this firm. The notes are on each page and are of the most helpful character. As we have said, Mr. Hudson is the man, of all men, to edit Shakespeare.

MAGAZINES.

Potter's Monthly for December will be an unusually strong and interesting number; the publishers announcing as among the leading articles to appear, one descriptive of the "Old North Church," Boston, handsomely illustrated from the sketches by the artists, Mayer Brothers. Also a well-written and timely paper entitled "The State and the Railway," by Prof. James Clement Ambrose, in which the writer thoroughly reviews the question of railway legislation and State control of corporations. None the less interesting will be paper III. of "Experiences with Modern Ghosts," in which the writer will continue his graphic details of an investigation into the mysteries of spiritualism. An excellent biographical sketch of the late Dr. Holland, editor of "The Century Magazine," accompanied with an excellent portrait of the doctor, is also promised from the pen of one of America's most talented and best-known writers.

NOTES.

In Boston a wise step has been taken to make their youth acquainted with their early colonial history.

A committee of ladies and gentlemen have established four "Old South Prizes," two of \$40 and two of \$25 each, for the best and second best essays written by such young persons on these two subjects: 1. What was the policy of the early colonists of Massachusetts towards Quakers and others whom they regarded as intruders? Was this policy in any respect objectionable, and, if so, what excuses can be offered for it? 2. Why did the American colonies separate from the mother country? Did the early settlers look forward to any such separation, and if not, how and when did the wish for it

grow up? What was the difference between the form of government which they finally adopted and that under which they had before been living? The essays must be sent in between October 1 and December 1.

KELLOGG'S "School Management," a new work published by E. L. Kellogg & Co., New York, is one of the most interesting books on the subject of teaching that we have ever been privileged to read. The author is a teacher of many years' experience, and has given the subject of school management careful study. His book should be read by every young teacher. It will save him the mortification of falling into many mistakes. The price is only seventy five cents, but the book is worth as many dollars to any person engaged in teaching. We are not paid for this notice. We have written it because of the merits of the book, and hope that each subscriber to the *Co-Worker* will secure a copy.—From the *Teacher's Co-Worker*.

THE proposed abolition of the evening schools in Boston has caused a good deal of discussion there. Wendell Phillips said that we have added to the old fashioned system a great many ornamental and unnecessary branches, and, he added, if there is to be a reduction or retrenchment in any quarter it should be on the outskirts rather than in the centre of the system. The ballot-box and education are twins and to no young man who is desirous of bettering his condition in life, no matter how humble, should the doors of the public schools, day or evening be closed. The original idea of the common school was to make good, intelligent, law-abiding citizens, and it was the opinion of the speaker that seventy years ago the common schools of the country were better than those of the present day. When a boy or girl is sent out of the public school to-day, he or she can do nothing that any one is authorized to pay a dollar for; the old system fitted a boy to earn his living. Mr. Hale suggested that if there must be a curtailing it would be better to close the day schools earlier and before the hot weather. He observed that one objection made to the evening school is that taxes cannot be laid for the education of adults, and he added that it was a peculiar fact that his objection was never raised when a person of more than the legal school age wished to attend an evening drawing class or to attend the day high school. But the objection is raised immediately when boys who are obliged to earn their living ask to be taught bookkeeping in the evening.

LITTLE fishes get into trouble when they play hooky. They should never run away from their school.

PROFESSOR of English Grammar: "Now, then, what is the gender of egg?" Student: "Please, sir, you can't tell until it is hatched."

A college student, in rendering to his father an account of his term expenses, inserted: "To charity, thirty dollars." His father wrote back: "I fear charity covers a multitude of sins."

AN Albany schoolboy believing in free translations, translated *dux femina facti*: the fact is woman is a duck.

BUTLER'S Analogy—Prof.: "Mr. T— Not prepared."

SCHOOLS IN EUROPE.

The boy who attends public school in England, studies about five hours a day. He has plenty of time for ball and marbles, unless the circumstances are such that he must work after school hours. In Germany, the children are obliged to devote about eight hours a day to their books. In France the young folks are worked still harder. The average in France is eleven hours a day. Of course the small children are not expected to study that long, but boys of fourteen are kept busy.

A FUGITIVE KING.

On May 29th of each year bands of English children go about with a sprig of oak in their caps or button-holes, and holding a nettle in their right hand they cry, 'Show your oak! Show your nettle!' Should the person thus hailed have no oak leaves about him, he—according to the rules of the game—is pricked with the nettle.

This is to celebrate the coming of Charles II., after a long exile, to the throne of England on May 29th, 1649. This Prince Charles was the hero of many adventures. He had to hide himself time and time again in all sorts of places from his enemies, Englishmen, who had beheaded his father, Charles I., and now wished to capture him. The Scotch fought for Charles, but were badly defeated in the battle of Worcester, September 3, 1651, when Charles had to fly for his life. He escaped with about fifty or sixty friends, but thought it safer to separate from them and hide himself where he best could. The Earl of Derby advised him to go to a place on the borders of Staffordshire, called Boscon. There was a lonely farm-house where in which lived a royal farmer named Pendrell. In this retired spot Charles stayed some time, working himself as a woodman with Pendrell and his brothers. The Prince shouldered the ax and cut faggots in the neighboring forest. On one occasion the soldiers were so persistent in their search, that it was thought unsafe for the fugitive to be seen. He therefore mounted a huge oak and sat concealed in its branches for twenty-four hours. While he was in the tree he could see the soldiers underneath who were searching for him. He even heard them wishing they could find him.

"After Charles' escape and restoration the tree which sheltered him was called the 'Royal Oak,' and it long enjoyed a great reputation in the neighborhood.

SOME students in a Maine University were scolding the janitor for remissness, and assured him that if he did not mend his ways he would go to the bad place. "And what will you do here?" said they. With a chuckle, the janitor replied, "Wait upon students, same as I do there, I s'pose."

THE St. Louis *Globe-Democrat* reports that six out of eight Kansas schoolma'ams couldn't spell "lucrative" right. Very likely. In the vocabulary of the schoolma'ams of the United States there is no such word as lucrative.

"WHAT'S the matter [with little Bonnie this morning?]" "Sure, mam, she's by'e sick; he tumbled off wan him wheels without a carriage to it."

MRS. LYDIA E. PINKHAM, OF LYNN, MASS.,



LYDIA E. PINKHAM'S
VEGETABLE COMPOUND.

Is a Positive Cure
for all these Painful Complaints and Weaknesses
so common to our best female population.
It will cure entirely the worst form of Female Complaints, all ovarian troubles, Inflammation and Ulceration, Falling and Displacements, and the consequent Spinal Weakness, and is particularly adapted to the Change of Life.
It will dissolve and expel tumors from the uterus in an early stage of development. The tendency to cancerous humors there is checked very speedily by its use.
It removes faintness, flatulency, destroys all craving for stimulants, and relieves weakness of the stomach. It cures Bloating, Headaches, Nervous Prostration, General Debility, Sleeplessness, Depression and Indigestion.
That feeling of bearing down, causing pain, weight and backache, is always permanently cured by its use. It will at all times and under all circumstances act in harmony with the laws that govern the female system.
For the cure of Kidney Complaints of either sex this Compound is unsurpassed.
LYDIA E. PINKHAM'S VEGETABLE COMPOUND is prepared at 233 and 235 Western Avenue, Lynn, Mass. Price \$1. Six bottles for \$5. Sent by mail in the form of pills, also in the form of lozenges, on receipt of price, \$1 per box for either. Mrs. Pinkham freely answers all letters of inquiry. Send for pamphlet. Address as above. Mention this Paper.
No family should be without LYDIA E. PINKHAM'S LIVER PILLS. They cure constipation, biliousness, and torpidity of the liver. 25 cents per box. Sold by all Druggists.

THE "ACME" PAPER

The Best Paper for School Use Made.

RECOMMENDED BY OUR BEST TEACHERS.

This paper, which has only recently been manufactured, is used extensively all over the country. Its merits as a paper for schools are as follows:
Its color is soft and mild which does not tire or injure the eyes like white paper. It is a strong paper, being made of manilla and heavily calendered, making it smooth and pleasant to write upon.

It can be furnished at very low prices.

CONDENSED PRICE LIST.

Paper ruled on one side, and bound in Pads of 100 sheets.
In pkgs. of 10 pads In pkgs. of 10 pads
Legal and Foolscap, \$3.00 Bath Letter, \$1.80
Congress Letter, 2.50 Commercial Note, 1.50
FULL PRICE LIST GIVEN ON APPLICATION.

EXERCISE BOOKS.

These books are being used extensively in a great many schools and are highly recommended. TRY THEM. You will be more than satisfied.

Size. Per page of 10. Size. Per page of 10.
6x8, 40 pp., \$50 6x8, 100 pp., \$1.00
I renew my offer to send one Exercise Book, 100 pages, and one pad, commercial note, 100 sheets—for 35 cents. Teachers, let me hear from you.

WILLIAM F. KELLOGG,

21 Park Place, New York.

HOPE FOR THE DEAF

Dr. Peck's Artificial Ear Drums
PERFECTLY RESTORE THE HEARING
and perform the work of the Natural Drum.
Always in position, best invisible to others.
All Conversation and even whispers heard distinctly. We refer to those using them. Send for descriptive circular with testimonials. Address,
H. P. K. PECK & CO., 444 Broadway, New York.

PAINE'S BUSINESS COLLEGE, 62 Bowery, cor Canal; "L" Station (Established 1849). Paine's up-town College, 1215 Broadway, 9th St., open 9 A.M. till 10 P.M. Young Men, Ladies, and Boys taught Bookkeeping, rudimentary and higher Mathematics, Correspondence and all English Branches; Writing lessons \$5, monthly. Arithmetic and Writing \$10, quarterly. Shorthand \$10. Bookwork persons rapidly advanced in private rooms.

WRITE for a Copy of COMPASS and large 4-page Illustrated Premium List—get up a club—E. L. KELLOGG & Co., Park Pl., N. Y.

ASTHMA Quickly and Permanently CURED
Dr. Stinson's Asthma Remedy is unequalled as a positive Alternative and Cure for Asthma and Dyspepsia, and all their attendant evils. It does not merely afford temporary relief, but is a permanent cure. Mrs. R. F. Lee, of Baltimore, O., says of it: "I am surprised at the speedy effect of your remedy. It is the first medicine in six years that has loosened my cough and made expiration easy. I now sleep all night without coughing." If your druggist does not keep it, send for treatise and testimonials to H. P. K. PECK & CO., 444 Broadway, New York.

BIG OFFER. A BOOK OF 400 Choice Selections for Autograph Albums. 250 Spicy Motto Verses and 25 latest popular Songs, all for 15 cents, post-paid; two for 25 cents.
Address J. L. PATTEN & CO., 32 Barclay St., N. Y.

777 A Year and expenses to agents. Outfit free. Address P. O. VICKERY, Augusta, Me.

THE BEST

ERA SER.

The Climax Blackboard Eraser.

Teachers! If you want a durable, healthy eraser get the *Climax*. It is so made that the Chalk Dust is caught between the strips of felt and does not fly down the throat of the person using the board.

READ WHAT IS SAID OF IT.

From Prof. F. A. Allen,
State Normal School, Mansfield, Pa.

"We have carefully and faithfully tested the Erasers made by you, and consider them the BEST we have seen. We have now in use ten dozen; so you see, we prove our FAITH by our WORKS."

From Prof. C. E. Carhart,
Troy Conference Academy, Poutney, Vt.

"I find the Eraser is just what I have long been wanting. It is splendid."

From Hon. G. S. Albee,
President State Normal School, Oskosh, Wis.

"The sample of Climax Eraser has given us satisfaction in the test. You shall have my influence in this State, as making the best Eraser yet known to us."

From Prof. A. G. Smith,
Superintendent of Public Schools, Ferrysburg, Ohio.

"The sample Erasers you sent me were

duly received. After a short trial, I am convinced that they are the best I have seen.

From Prof. A. N. Raub,
Principal State Normal School, Lock Haven, Pa.

"We consider the Rubbers 'the BEST WE HAVE EVER USED.'"

From Hon. J. H. French, LL.D.,
Ex-Secretary of State Board of Education, Vermont.

"The BEST THING I have ever seen in that line."

From Prof. W. B. Paterson,
President Lincoln University, Marion, Ala.

"I am highly pleased with your Erasers."

From Hon. Robert M. Lusher,
State Supt. Public Education, New Orleans, La.

"I have tested your Climax, and deem it excellent."

PRICE LIST.

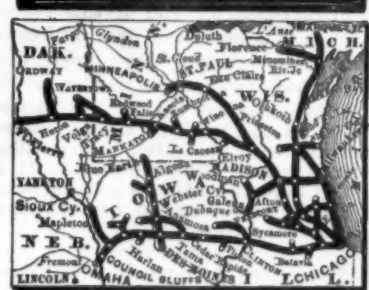
All Wool Felt, per dozen, \$2.00 Cloth Felt, per dozen, \$1.50

Discount to the Trade. Sample by mail, Fifteen Cents.

WM. F. KELLOGG, 21 Park Place, N. Y.

KINDERGARTEN NORMAL INSTITUTE AND National Kindergarten, Washington, D. C. The sixth year of the Kindergarten Normal Class for the training of teachers begins Oct. 15th. (Positions secured for those who are qualified.) Teachers receive four lectures per week on the use and philosophy of the twenty gifts and occupations of Froebel's kindergarten system; on the art of story-telling and the educational value of play, together with object lessons and daily practice in the kindergarten. Mothers receive lectures on "The Kindergarten in the Nursery." Wednesday afternoons. Terms: full course of eight months, \$10.00. Wednesday afternoon lectures (twenty) to mothers, \$5.00. Requirements are: love of children, good common English education, refined manners, desire to improve, and good health. Mrs. Louise Pollock, 209 Eighth street, N. W., or Miss Annie Pollock, 127 Thirteenth street, N. W., Principals.

C AND N-W RAILWAY



Chicago & North-Western RAILWAY

Is the OLDEST! BEST CONSTRUCTED! BEST EQUIPPED! and hence the

LEADING RAILWAY

WEST AND NORTHWEST.

It is the short and best route between Chicago and all points in Northern Illinois, Iowa, Dakota, Wyoming, Nebraska, California, Oregon, Arizona, Utah, Colorado, Idaho, Montana, Nevada, and for

COUNCIL BLUFFS, OMAHA
DENVER, LEADVILLE,
SALT LAKE, SAN FRANCISCO,
DEADWOOD, SIOUX CITY,

Cedar Rapids, Des Moines, Columbus, and all points in the Territories, and the West. Also, for Milwaukee, Green Bay, Oshkosh, Sheboygan, Marquette, Fond du Lac, Watertown, Houghton, Neenah, Menasha, St. Paul, Minneapolis, Huron, Verona, Fargo, Bemidji, Wisconsin, LaCrosse, Oshkosh, and all points in Minnesota, Dakota, Wisconsin and the Northwest.

At Council Bluffs the trains of the Chicago & North-Western and the U. P. Rys depart from, arrive at and use the same Joint Union Depot.
At Chicago, close connections are made with the Lake Shore, Michigan Central, Baltimore & Ohio, Ft. Wayne and Pennsylvania, and Chicago & Grand Trunk Rys, and the Kansas and Pac. Handle Routes.

Close connections made at Junction Points.

It is the ONLY LINE running

Pullman Hotel Dining Cars

Chicago and Council Bluffs.

Pullman Sleepers on all Night Trains.

Insist upon Ticket Agents selling you Tickets via this road. Examine your Tickets, and refuse to buy if they do not read over the Chicago & North-Western Railway.

You wish the Best Traveling Accommodations you will buy your Tickets by this route. AND WILL TAKE NONE OTHER.

21 Ticket Agents sell Tickets by this Line.
Marvin Haghit, 24 V. P. & Gen'l Mng'r Chicago,

THE NUMBER OF SCHOOL BOOKS.

A gentleman, who is connected with the school-book trade, says that few people have a clear idea of the great number of books required by the schools of the United States. He has made a careful estimate of the number in use, as follows:

Arithmetic, practical and higher	1,750,000
Arithmetic, elementary	3,750,000
Algebra	500,000
Astronomy	750,000
Bookkeeping	500,000
Copy-books	15,000,000
Composition-books	1,000,000
Etymologies	500,000
Geographies	5,000,000
Grammars	2,000,000
History, general	500,000
History, United States	1,500,000
Natural Philosophy	500,000
Readers	5,000,000
Spellers and Definers	2,500,000

A FLYING NEWSPAPER.—One of the curiosities of this age of wonderful things is that a newspaper is printed daily in the trains running between New York and San Francisco. It is a small sheet, but is full of telegraphic news, which it receives at the various stations during the night. In the East the paper is not appreciated quite as much as in the far West, where the passengers are unable to get city journals. A passenger while at breakfast on the summit of the Sierra Nevada Mountains can, by this odd little paper, learn what occurred in the business and political worlds the day before.

THE GREAT EASTERN.—The famous steamship Great Eastern will be sold in London before the end of this year—that is, if a purchaser can be found. She is now twenty-three years old. Everybody now admits that she is too big for practical use in navigation. Even in the work of laying cables, smaller ships are better. She is called the "marine white elephant." It is likely that she will be anchored at some seaside resort, and, in her old age, turned into a hotel.

THOUSANDS of women have been entirely cured of the most stubborn cases of female weakness by the use of Lydia E. Pinkham's Vegetable Compound. Send to Mrs. Lydia E. Pinkham, 233 Western Avenue, Lynn, Mass., for pamphlet.

JOSH BILLINGS says he wouldn't give five cents to hear Bob Ingersoll on "The Mistakes of Moses," but he would give \$500 to hear Moses on the mistakes of Bob Ingersoll.

A LADY'S WISH.

"Oh, how I do wish my skin was as clear and soft as yours," said a lady to her friend. "You can easily make it so," answered the friend. "How?" inquired the first lady. "By using Hop Bitters, that makes pure rich blood and blooming health. It does it for me, as you observe."

FRESH—"May I have the pleasure?" Miss Society—"Oui." Fresh—"What does 'we' mean?" Miss S.—"O, U, and I."

WHY ARE YOU BILLIOUS?

Because you have allowed your bowels to become costive, and liver torpid. Use Kidney-Wort to produce a free state of the bowels, and it will stimulate the liver to proper action, cleans the skin of its yellowness, cure bilious headache, and cause new life in the blood. Druggists have it, both dry and liquid.—*Zion's Herald.*

VOCAL DEFECTS.
SINGING. ROOMS OF ELOCUTION.

R. ELLIOTT CLARKE,

SPECIALIST
—IN—
VOCAL TRAINING.

The course occupies three months (two lessons per week.)

TERMS:

Full Course in Private,	\$50.00
" " in Class of 5 Persons,	25.00 each.
" " " 10 " "	15.00 "
" " " 15 " "	10.00 "

Special Rates to Societies, Schools, and Church Classes.
Special Class for Clergymen, Teachers and Ladies.

1514 CHESTNUT STREET, PHILADELPHIA.

READING. VOCAL IMPEDIMENTS. STAMMERING.

Normal School for Kindergarten Teachers

With Model Kindergarten and Elementary Classes.

7 EAST 22d STREET, NEW YORK.

Will reopen the Tenth Annual Course, October 5th, 1881, and close in June, 1882. For particulars as to terms, etc., inquire of

PROF. JOHN KRAUS,
MRS. MARIA KRAUS-BELTE, (Principal,
(Authors of the Kindergarten Guide, etc.)

Prof. KRAUS is a disciple of the Pestalozzi-Diesterweg-Froebel School, and one of the first propagators of the Kindergarten in this country.

"Mrs. Kraus-Belte, of all American Kindergarten teachers, holds the highest place. It is to the labor of this lady more than any other, perhaps, that the increasing success of Kindergarten in America is due, and her pupils have accomplished more than all the rest.—*The Galaxy.*"

"Mrs. Kraus is a first authority upon the subject,—unsurpassed, certainly, by any one, in her knowledge of Froebel's principles. Her ideal of a trained Kindergarten teacher is so high, and she inspires her pupils with such a standard, and at the same time with so much modesty, and ardor to improve, that to have her certificate is a guarantee of excellence.—Miss E. P. Peabody, in Kindergarten Messenger.

Packard's Business College,

METHODIST BUILDING, 805 BROADWAY, NEW YORK.

This is a professional school for business training, and is under the personal supervision of the founder and proprietor, Mr. S. S. Packard, who for the past 30 years has been associated with Bryant and Stratton, and is the author of the Book-keeping series which bears their name. The College was founded in 1858, and has made steady progress in utility and public favor, and now stands at the head of this class of schools. The location is unsurpassed; the rooms spacious and elegant; the course of study most thorough and efficient. The rates of tuition have recently been reduced, and pupils can enter at any time. Tuition per term of 11 weeks, \$45.00. Call or send for circular containing full particulars. S. S. PACKARD, Principal.

The Misses Chadeayne,

OF 518 MADISON AVENUE, NEW YORK.

Invite the particular attention of those parents who desire a School for their children, where the number received is sufficiently small for constant personal attention to be given to each one of the pupils, together with really practical instruction in the Modern Languages. The School has been long known and patronized by the first families, and any who visit it can be furnished with excellent references and letters of recommendation.

Important Notice

Every lady or gentleman possesses, from practical experience, a knowledge as to the value of some particular Recipe or method of baking or cooking some particular article of food. The Great Western Publishing Co. is preparing a complete

HOUSEHOLD ENCYCLOPEDIA

of practical Recipes and methods of cooking, baking, carving, and the whole list of household and farm pursuits. Every person who reads this notice is earnestly requested to contribute something to the forthcoming book, no matter what. Please give us the benefit of your experience as to the best method of preparing some particular article of food. How to make some particular variety of cake, bread, pies; to prepare coffee, tea, etc.; to preserve fruit; to roast fowls, prepare dressings,—anything that you know to be good is what the publishers want.

To those whose Recipes are used, due credit will be given in the book (unless requested to withhold the name), and a copy of the same will be forwarded free to them, as soon as published. In addition, to every person who sends one or more Recipes, the publishers will forward any one of the Premium articles offered that may be selected, and allow a

Credit of \$2.00 on the Price, as payment for the time and trouble involved in sending the Recipe.

LIST OF SILVERWARE PREMIUMS:

One Set (6) Silver-Plated Tea-Spoons,	\$2.70
One Set (6) Silver-Plated Table-Spoons,	3.00
One Set (6) Silver-Plated Table-Forks,	3.00
One Set (6) Silver-Plated Table-Knives,	3.75

Any of the Premiums offered in the Premium Order will be forwarded as soon to any person who sends a Recipe of any kind to the publishers, and a credit of \$2.00 allowed for the same, which amount may be deducted from the wholesale price given, and the premium will be shipped at once on receipt of the difference. There are no restrictions as to where the Recipe is secured—it may be copied from any cook-book—but the publishers want the personal independent of the sender that the Recipe is a good one, and worthy a place in their book.

The Premiums offered are the very best goods that can be secured. All but the Knives are plated on nickel and silver, so that no amount of wear will produce any other color but that of silver, while the Knives are of the best steel, handle and blade as each to the amount of \$2.00, in payment for any Premium offered, and the Premium selected will be forwarded at once. The order and 20c. secures the Tea-spoons; or with \$1.00 the Table-spoons; or with \$1.00 the Forks; or with \$1.25 the Knives; or all the Premium articles will be sent on receipt of the Premium Order and \$2.00. Address all orders to THE GREAT WESTERN PUBLISHING CO., 185 Race St., Cincinnati, O.

PREMIUM ORDER

ON DEMAND, when accompanied with one or more Recipes for publication in the HOUSEHOLD ENCYCLOPEDIA, this Premium Order will be accepted as cash to the amount of \$2.00, in payment for any of the following Premium articles, at the wholesale price quoted:

One Set (6) SILVER-PLATED TEA-SPOONS,	\$2.70
One Set (6) SILVER-PLATED TABLE-SPOONS,	3.00
One Set (6) SILVER-PLATED TABLE-FORKS,	3.00
One Set (6) SILVER-PLATED TABLE-KNIVES,	3.75

SEND OUT THIS Order and forward it for redemption.

GREAT WESTERN PUBLISHING CO.

Books for Teachers

Every teacher should own a number of standard professional books. He needs them as much as the physician and lawyer need professional works. Do you, reader, own one? two? We have thousands of volumes, and yet there are 300,000 teachers to-day that have nothing that is prepared specially to aid them in their work! It is a state of educational heathenism.

We have selected a few volumes of really standard "Books on Teaching."

Kellogg's School Management.

This volume by the editor of the SCHOOL JOURNAL, contains practical ideas on this important subject. Any teacher will by reading it be able to enter his school with more tact, clearer ideas, and be helped to succeed in governing. It has an introduction by Prof. Thomas Hunter, President of the New York Normal College. He strongly commends it. Also Prof. William F. Phelps, Superintendent of the Wisconsin Public Schools, and many other eminent educators. Price 75 cents, postpaid.

De Graff's School-Room Guide.

Prof. De Graff is probably better known as a conductor of Institutes than any other man. He has given a great impulse to educational progress. The book is a careful statement of the instructions given by him at the New York, Penn., New Jersey, and W. Virginia Institutes, and especially is intended to assist teachers in the practical work of the school-room. In each subject the author has given:

- 1st. An Introduction.
 - 2nd. Directions, or how to teach the subject.
 - 3rd. Cautions, or how to avoid mistakes in teaching the subjects.
 - 4th. Results, or the ends to be attained in teaching the subjects.
- It brings out the most interesting and philosophical methods of presenting subjects for instruction. The topics treated embrace nearly every branch of study and sphere of duty in the public school. Among them are: Reading, phonics, spelling, penmanship, drawing, language, history, recitations, calligraphy, letter writing, arithmetic, geometry, grammar, geography, climate, natural science, disciplinary movements, organization, management.

457 pages, handsomely bound in cloth. Price \$1.50 postpaid. This is one of the most attractive and helpful books on our list, and we have sold a large number.

Page's Theory and Practice of Teaching.

Stands at the head of all books for teachers. It is a priceless volume. No man in this country taught as did David P. Page, the first Principal of New York State Normal School. He will stand as the symbol of natural teaching to the end of time. If one can own but one volume, he should own this; it is the book to begin with. It should be read over as often as possible. It will help a good teacher, and it will help a poor teacher, too. Price \$1.50 postpaid.

Johannot's Principles and Practice of Teaching.

The author was a pupil of Mr. Page. He was the President of the N. Y. State Teachers' Association in 1879-80; is a popular conductor of Teachers' Institutes, and has spent his life in educational work. The volume is a capital one, and will be of real practical service. It covers a different field from any other. It will be a great aid to any teacher. Price, \$1.50, postpaid.

Brooks' Normal Methods.

This volume prepared by Edward Brooks, Principal of the Millersville Normal School, Pa., is another volume of great merit. It is sufficient to say that Mr. Brooks is a remarkable teacher, and that his book is attracting attention as a practical guide for a thoughtful teacher. Price, \$1.50, postpaid.

Craig's Question Book.

This is exceedingly useful for all who wish to review their studies or who wish to select questions for their classes. It has 3,000 practical questions on history, grammar, arithmetic, etc., etc., with answers. Each department of questions is followed by department of answers on same subject; each question numbered and corresponding number found in preceding page. We give list of departments: U. S. History, geography, grammar, arithmetic, reading, orthography, rules of spelling, derivations of words, penmanship, parties and infinitives made easy, civil government, parliamentary laws and usages, physiology and anatomy, general geography. Ten editions have been published. This is the last revised edition. Price, postpaid, \$1.50.

The Normal Question Book.

This volume like the last is designed for a review of studies for examination. It also contains 3,000 questions with answers quoted from standard works. Price, \$1.50, postpaid.

Calkin's Object Lessons.

Prof. Calkin is the Sup't. of the Primary Schools in N. Y. City and has had a wide experience. He is one of the wisest of counselors and is greatly beloved by the teachers of the metropolis. This is undoubtedly the best work on the subject published, and should occupy a prominent place in every teacher's library. It is especially useful to primary teachers. It is a standard work on a subject of growing importance. 30,000 copies of this book have been sold—this shows that some teachers prepare for meeting their responsibility. Its price is \$1.50, postpaid.

How to Teach.

This volume describes the methods used in the New York Public Schools. It was prepared by City Superintendents Kiddie, Harrison, and Calkin. It details the methods in each grade, and a knowledge of it may almost be said to be required of every teacher in the New York City. Price, \$1.50, postpaid.

Manuals for Teachers.

Cultivation of the Senses. Cultivation of the Memory. On the Use of Words. On Discipline. On Class Teaching. These manuals are reprints from works published in England and are highly valued by the London teachers. They cover a large field; they have practical suggestions, and are not merely theoretical. An. one of these will be sent postpaid for 50 cents or the set of five for \$2.50 postpaid. Address

E. L. KELLOGG & Co.,
21 Park Place, New York.

A TRADE IN SNAILS.

In the Tyrol, a province of the Austrian Empire, there are gardens in which only snails are raised. These gardens are only small plots of land cleared of trees and covered with heaps of moss and pine-twigs. They are separated from each other by ditches, each one of which has a grating at its outlet to prevent the snails from crawling away. All the summer the Tyrolean children search woods and fields for snails to put in the gardens, where the little animals remain all the winter. Single gardens have been known to turn out 40,000 snails. They are packed in kegs and shipped to various parts of the world, and are eaten as a delicacy by many people.

A POLITE man, rushing along the street the other night, struck a man going in the opposite direction, but stopped long enough to say: "My dear sir, if I ran into you, I beg your pardon. If you ran into me don't mention it." And he tore away at redoubled speed.

INSTANCES are known where ships have been saved in storms by emptying casks of oil among the angry waves. In the Gulf of Mexico, between New Orleans and Galveston, there is a space called the "Oil harbor." It is in the open gulf, but it is never disturbed, however high the waves may run just outside of its borders. Vessels sail into the oily water, and there safely ride at anchor as long as their captains please. It is supposed that the bottom of the gulf at that point contains a great deal of oil, such as is found in the oil lands of Pennsylvania. In fact, some enterprising business men are considering whether the oil could not be secured in some way for commercial use.

ASTHMA sufferers should write to H. P. K. PECK & Co., New York City. See the advertisement headed "Asthma Cured" in another column.

THE short, pithy sayings of great men pass into proverbs, and the short nib engraving pens of Esterbrook's manufacture delight both heart and hand of rapid writers.

NATURE'S SLUICE-WAY.

The kidneys are nature's sluice-way to wash out the debris of our constantly changing bodies. If they do not work properly the trouble is felt everywhere. Then be wise and as soon as you see signs of disorder get a package of Kidney-Wort and take it faithfully. It will clean the sluice-way of sand, gravel or slime and purify the whole system. Druggists sell it, both liquid and dry, and it is equally efficient in either form.—Independent.

AN agricultural exchange offers some advice on "how to tell a bad egg." Didn't read the article, but our advice would be: if you have anything important to tell a bad egg, why break it gently.

TRUTH AND SOBERNESS.

What is the best family medicine in the world to regulate the bowels, purify the blood, remove costiveness and biliousness, aid digestion and stimulate the whole system? Truth and soberness compels us to answer, Hop Bitters, being pure, perfect and harmless. See "Truth" in another column.

MADAM ZADOC PORTER'S
CURATIVE
COUGH BALSAM.

Favorably known and
Largely Used in New
York City and Vicinity
for over Forty Years.

25, 50 & 75c. a Bottle

ONE OF THE BEST,
CHEAPEST AND MOST
EFFECTUAL OF REM-
EDIES.

Warranted, if used according to directions, to cure or relieve Coughs, Colds, Croup, Whooping Cough, Asthma, and all Affections of the Throat and Lungs.

A Purely Vegetable Expectorant; not a violent remedy; and very agreeable to the taste.

If you have a cold, if ever so slight, do not fail to give the Balsam a trial. The timely use of a 25c. bottle will often prove it to be worth a hundred times its cost.

The 75c. bottle contains four times as much as the 25c. bottle.

The Purest and Best Medicine ever made.

A combination of Hops, Buchu, Mandrake and Dandelion, with all the best and most curative properties of all other Bitters makes the greatest Blood Purifier, Liver Regulator, and Life and Health Restoring Agent on earth.

No disease or ill health can possibly long exist where Hop Bitters are used, so varied and perfect are their operations.

They give new life and vigor to the aged and infirm.

To all whose employments cause irregularity of the bowels or urinary organs, or who require an Appetizer, Tonic and mild Stimulant, Hop Bitters are invaluable without intoxicating.

No matter what your feelings or symptoms are, what the disease or ailment is, use Hop Bitters. Don't wait until you are sick, but if you only feel bad or miserable, use the Bitters at once. It may save your life. It has saved hundreds.

\$500 will be paid for a case they will not cure or help. Do not suffer nor let your friends suffer, but use and urge them to use Hop Bitters.

Remember, Hop Bitters is no vile, drugged, drunken nostrum, but the Purest and Best Medicine ever made: the "Invalid's Friend and Hope," and no person or family should be without them.

Get some this day.

For COUGH, CROUP, the sweetest, safest and best Ask Children.

One Hop PAD for Stomach, Liver and Kidneys is superior to all others. Ask Druggists.

D. I. C. is an absolute and irresistible cure for Drunkenness, use of opium, tobacco and narcotics.

All sold by druggists. Hop Bitters Mfg. Co. Rochester, N. Y. Send for Circular.

KIDNEY-WORT
THE ONLY MEDICINE

IN EITHER LIQUID OR DRY FORM

That Acts at the same time on

THE LIVER, THE BOWELS,

AND THE KIDNEYS.

WHY ARE WE SICK?

Because we allow these great organs to become clogged or torpid, and poisonous humors are therefore forced into the blood that should be expelled naturally.

KIDNEY-WORT

WILL SURELY CURE

KIDNEY DISEASES,

LIVER COMPLAINTS,

PILES, CONSTIPATION, URINARY

DISEASES, FEMALE WEAKNESSES,

AND NERVOUS DISORDERS,

by causing free action of these organs and restoring their power to throw off disease.

Why suffer Bilious pains and aches?

Why tormented with Piles, Constipation?

Why frightened over disordered Kidneys?

Why endure nervous or sick headaches?

Use KIDNEY-WORT and rejoice in health.

It is put up in Dry Vegetable Form, in tin cans one package of which makes six quarts of medicine. Also in Liquid Form, very Concentrated, for those that cannot readily prepare it.

It acts with equal efficiency in either form. GET IT OF YOUR DRUGGIST. PRICE, \$1.00

WELLS, RICHARDSON & Co., Prop's,

(Will send the dry post-paid.) BURLINGTON, VT.

30 DAYS TRIAL ALLOWED.

We will send on 30 days trial

DR. DYE'S

Electro-Voltaic Appliances.

Invented by the eminent Dr. A. M. Dye, and especially designed for the cure of all nervous Diseases, General Debility, Lost Vitality, etc., the result of abuses and other causes. Also for Liver and Kidney Diseases, Rheumatism, Neuralgia, Paralysis, Hysteria, Female Troubles and many other Diseases. Wonderful cures quickly effected. Illustrated pamphlet sent free. Address,

VOLTAIC BELT CO., Marshall, Mich.

New York Conservatory of Music.

LOCATED ONLY AT

No. 5 EAST FOURTEENTH STREET,

3d door East of Fifth Avenue.

INCORPORATED 1865.

This renowned Music School offers the accumulated advantages of years of successful operation. The corps of Professors numbers over forty of the ablest in the country.

N. B.—The New York Conservatory, the only Chartered Conservatory of Music in the State, is entirely separate and distinct from all other Music Schools which imitate its name and methods.

The offices are open daily from 9 A. M. till 10 P. M., for the reception and classification of the pupils. Pupils may begin at any time, terms commencing from date of entrance.

S. M. GRISWOLD, President.

THE

TEACHERS' INSTITUTE.

Devoted to the Principles and Practice of Teaching.

16 LARGE PAGES. MONTHLY, ONE DOLLAR A YEAR.

"As the Teacher is so is the School."

"The Teacher is the Soul of the School."

We lay it down as a grand principle—one that cannot be controverted:—

The man or woman who is engaged in an honorable business

should strive to know all he can about that business.

If he is engaged in educational work he should read and study upon EDUCATION.

This paper is published for the specific purpose of aiding all engaged in educational work—whether teachers, principals, superintendents or school officers. No one engaged in educational work, can AFFORD to be without the valuable information it contains.

It is a disgrace that nine out of ten undertake to go through the motions of teaching, superintending, or controlling educational matters and yet know absolutely nothing of the views and methods of leading educators.

If you are a Teacher

Then you should desire to be a FIRST-CLASS TEACHER. "As the teacher so is the school." If the teacher is full of new thoughts, earnest in study, wide-awake and original, his school will follow his example. There is a vast number of poor teachers—they know but little more than their oldest pupils and they absolutely refuse to learn any more; they turn the same creaky old grindstone around year after year. Such damage their pupils—they waste away the unreturning years of childhood! For the sake of your scholars, study up your business.

If you are a Principal or Superintendent

You will find this journal filled to the brim with educational ideas. You are a leader, and the question is, do YOU know what an educational leader should know? To do justice to your position we urge you to take this journal. To be a real leader there must be a possession of the best ideas—you must know the discussions and conclusions of other leaders; you must not only read the views of Pestalozzi and Page, but the thoughts of eminent living educators.

If you are a School Officer

You need the suggestions and information this journal contains. Most school officers have no knowledge of the business they are chosen to manage. They are unable to judge whether the teaching is good or bad. Such will find this journal an able adviser on every point. The number of school officers who subscribe for an educational journal is steadily increasing. You should be a subscriber in order to enable you to understand your business. YOU OWE IT TO THE PUBLIC TO POST YOURSELF ON EDUCATION. This journal is full of matter bearing on your business. It will give a clear view of the great educational movements now going on. It is indispensable to you. ADDRESS

E. L. KELLOGG & CO.,

EDUCATIONAL PUBLISHERS,

21 Park Place, New York.

SOMETHING NEW

PRETTY STORIES

A COMPOSITION BOOK FOR THE YOUNGEST CHILDREN.

A beautiful little book of twenty four pages, with a pretty picture at the head of each page for a subject. The best thing to teach the children to write their thoughts easily. Sample mailed for 10 cents.

First Series. Vol. I. _____ per 100 _____ \$5.00

Second Series. Vol. II. _____ per 100 _____ \$5.00

WILLIAM F. KELLOGG, 21 Park Pl., N. Y.

Dealer in all kinds of School Supplies.

Pretty Stories.

Every reader of this paper should send for a copy of this book. It is intended to be used in school for compositions. At the head of every page is an interesting picture about which you write the pretty story. Send 10 cents for a sample.

WM. F. KELLOGG & CO.,

21 Park Place, New York.

THE

PRETTY STORIES SPELLING GAME,

—OR—

Word Contest.

It is acknowledged to be the most interesting and exciting game ever published; at the same time serves as a valuable EDUCATOR of both old and young, uniting the best elements of social home enjoyment. The game may be varied by making it Geographical, Historical, Authors or Bible names. The game may be played by any number of persons. Price 25 cents. Postage prepaid.

The Illustrated Dictionary.

Very handsomely bound in Cloth. Containing 674 pages. Nearly 80,000 words.

This book is a complete epitome of valuable explanations and definitions of difficult English and Foreign words, phrases and expressions, with the correct pronunciation of each word. To introduce them, we will send one Dictionary. Price 30 cents. Postage prepaid.

Address PROGRESS PUBLISHING CO.,

BROOKLYN, E. D., NEW YORK

Note.—We will send one Spelling game and one Dictionary on receipt of 65 cts. 1 each of stamps taken.

